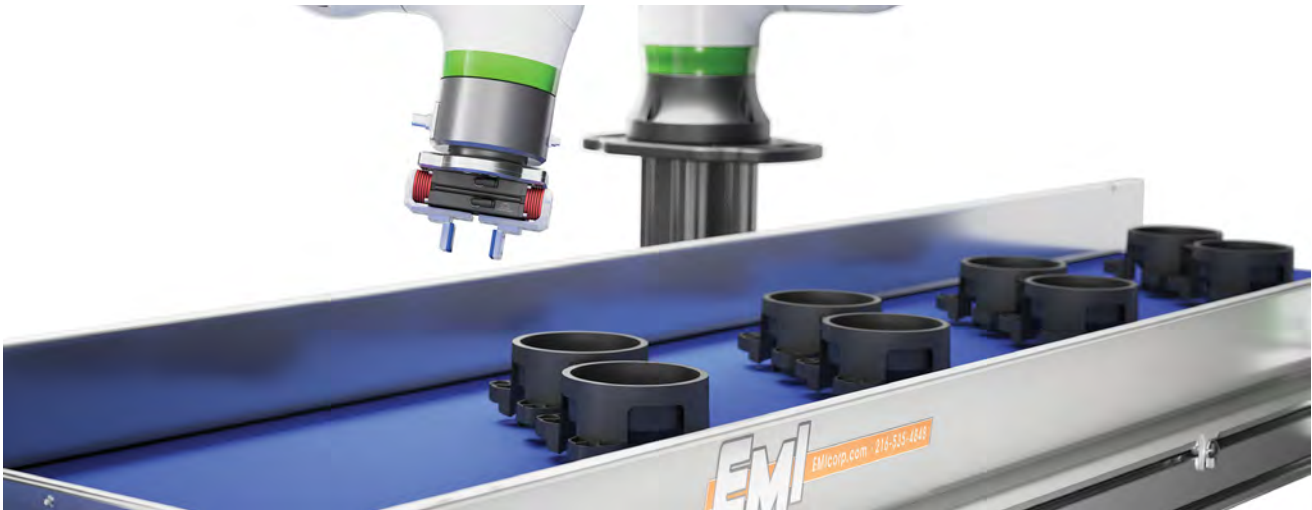


EOAT for Cobots Overview



Industrial End Effectors for Cobots

EMI's years of experience in automation applications prove that we can provide the perfect solution for a wide variety of industrial end effector and custom cobot gripper kit needs. Our engineers have outfitted a number of our industry-proven pneumatic and electric grippers to easily adapt to, and maximize the high repeatability of Cobots from Universal Robots, Doosan, Sawyer, Kuka, Fanuc, and other Industrial Robots.

Understanding the need for automation beyond the injection molding machine, EMI now offers a complete lineup of plug-and-play and custom Cobot solutions for the plastics industry. Our engineers are continuously working with customers to improve their operations and researching new products that are applicable to your processes.

Many of the Gripper Kits require fingers or jaws that EMI engineers can help design based on years of expertise solving customer applications from simple to complex, machined, or 3D printed.

Need assistance with an industrial end effector or custom cobot gripper kit?

Email Cobots@EMICorp.com or call 216-535-4848 to get in touch with an experienced engineer.

Quick Changers

p.114



Interface Plates

p.124



Flange Mono Clamps

p.180



Cobot Accessories

p.178



Cobot Ready Conveyor

p.186



Cobot Stands

p.184



EOAT for Cobots Overview

Modular Vacuum Gripper Kit p.128



3D Printed Vacuum Gripper Kit p.132



Kit-UR-V Vacuum Gripper Kit p.134



OnRobot Vacuum Grippers



p.138

Schmalz® CobotPump Electric Vacuum Generator p.142



Two-Jaw Gripper Kits p.146



Three-Jaw Gripper Kit p.148



Gimatic Electric Gripper Kits p.152



OnRobot 2-Jaw Grippers p.154



OnRobot 3-Jaw Grippers p.160



Machine Tending Kits p.162



Soft Grippers p.168



PIAB® piSoftGrip p.172



Specialty Grippers p.176

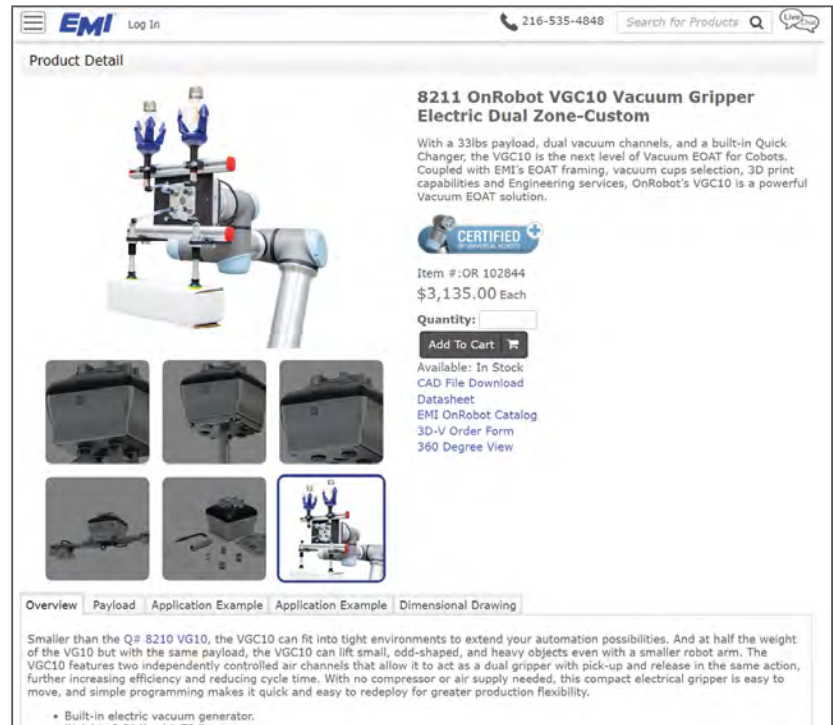


EOAT for Cobots

Easy Online Ordering!

All our Cobot kits can be ordered online. Product detail pages include all the information you need:

- Application examples
- CAD file downloads
- Additional specifications
- Dimensional drawings
- Related items
- Replacement parts



8211 OnRobot VGC10 Vacuum Gripper Electric Dual Zone-Custom

With a 33lbs payload, dual vacuum channels, and a built-in Quick-Change, the VGC10 is the next level of Vacuum EOAT for Cobots. Coupled with EMI's EOAT framing, vacuum cups selection, 3D print capabilities and Engineering services, OnRobot's VGC10 is a powerful Vacuum EOAT solution.

CERTIFIED

Item #: OR 102844
\$3,135.00 Each

Quantity:

Add To Cart

Available: In Stock
CAD File Download
Datasheet
EMI OnRobot Catalog
3D-V Order Form
360 Degree View

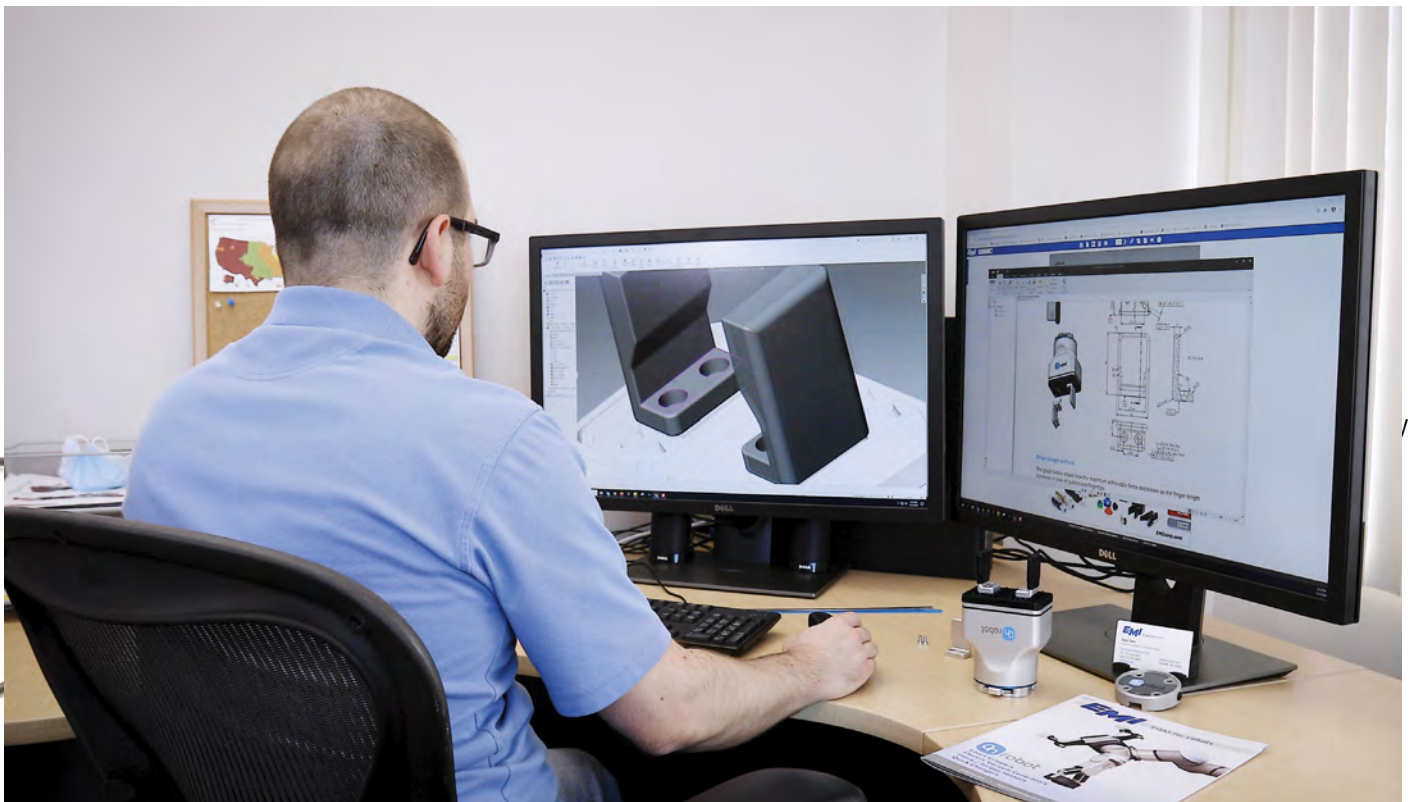
Overview | Payload | Application Example | Application Example | Dimensional Drawing

Smaller than the Q# 8210 VG10, the VGC10 can fit into tight environments to extend your automation possibilities. And at half the weight of the VG10 but with the same payload, the VGC10 can lift small, odd-shaped, and heavy objects even with a smaller robot arm. The VGC10 features two independently controlled air channels that allow it to act as a dual gripper with pick-up and release in the same action, further increasing efficiency and reducing cycle time. With no compressor or air supply needed, this compact electrical gripper is easy to move, and simple programming makes it quick and easy to redeploy for greater production flexibility.

- Built-in electric vacuum generator.

Support you can count on! Regional Sales Managers and Engineers on Call

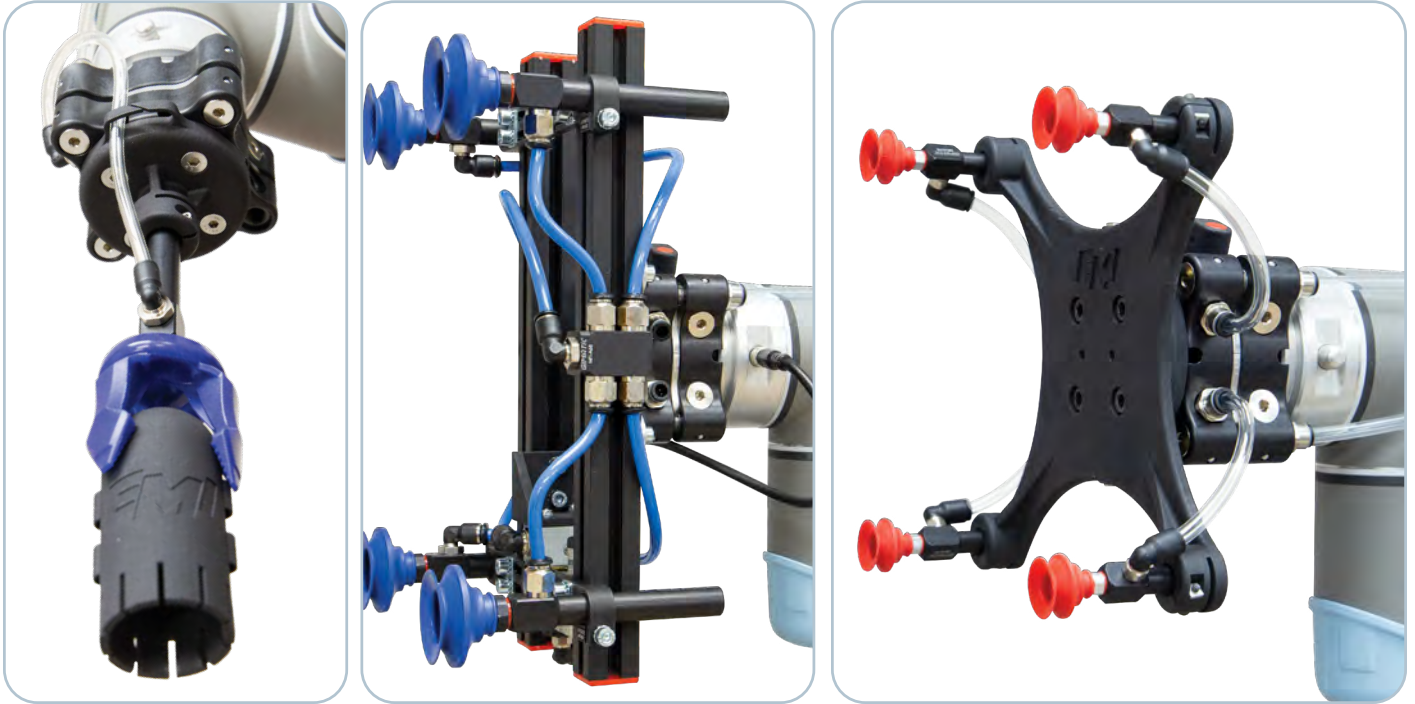
With over 12,000 custom EOAT projects completed, our 20 dedicated EOAT Engineers are on staff ready to answer YOUR EOAT questions about YOUR EOAT project. EMI's Experienced Engineering Department is dedicated to help design and support all your EOAT and Cobot needs. We're easily accessible, friendly, and helpful. Give us a call and let us help you.



Quick Changers for Collaborative Robots

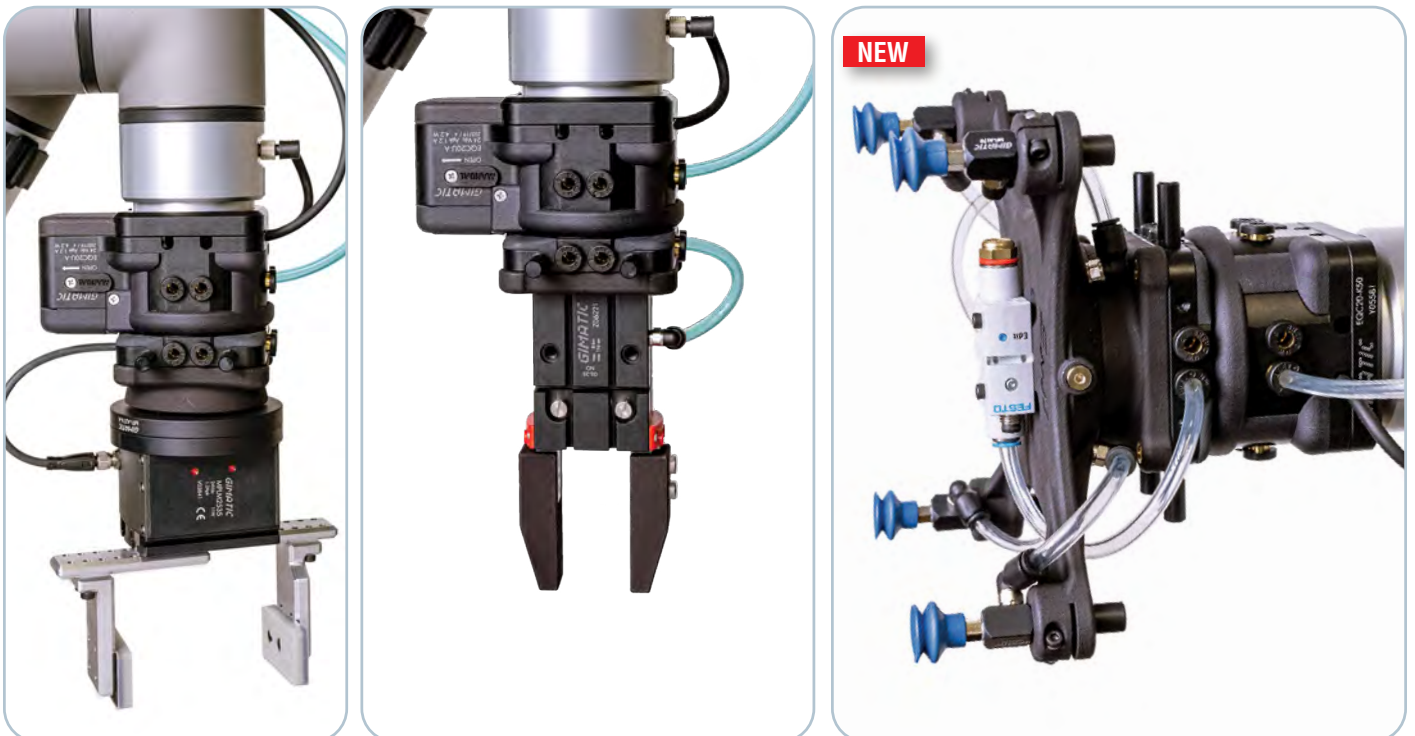
QC75 is a Manual Quick Changer, Ideal for Plug & Play or Custom EOAT

The QC75 was designed for collaborative robots, incorporating configurable electrical connections, innovative pneumatic pass-through ports and locked position confirmation. See page 114.

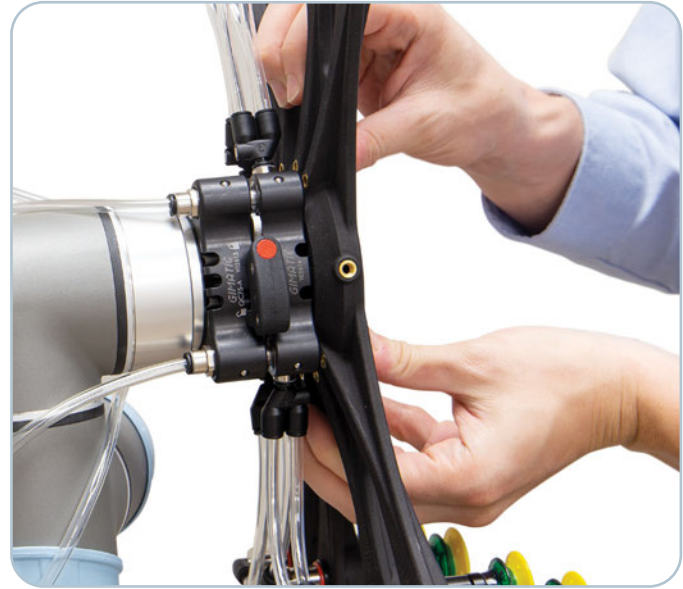


EQC is an Electrically-Powered Automatic Quick Changer, Compatible with a Wide Range of Grippers

The first of its kind to offer a quick disconnect solution that's electrically-actuated and lightweight, this is the best tool changer for quick, hands- and hassle-free changing of tools on your cobot. Built-in pneumatic pass-through ports and optional electrical connectors provide the flexibility required for your EOAT applications. See page 116.



Manual Quick Changer for Collaborative Robots – QC75

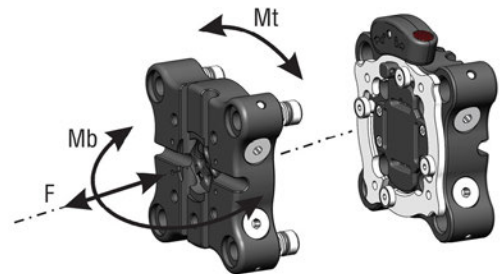
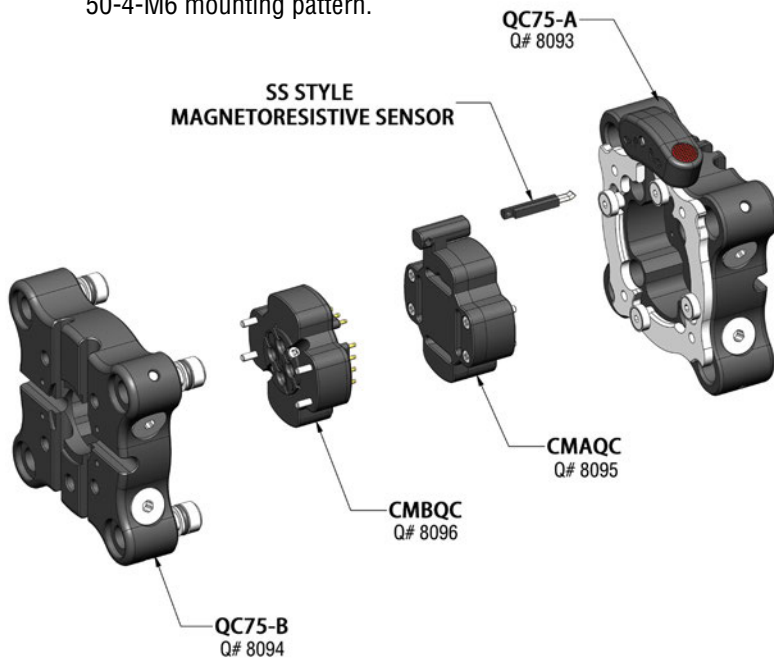


Designed for collaborative robots, the QC75 is a manual quick changer that allows for pneumatic and electrical connections to be easily coupled between jobs. Standardize up to 16 electrical contacts and 4 pneumatic lines to have your cobot up and running with minimal downtime.

With the same mounting pattern as the tool flange of your cobot (ISO-9409-1-50-4-M6), you can mount any “Plug & Play” end effector to the QC75-B for a quick and repeatable installation for every job. End effectors can be hard-wired to the QC75-B, or plugged to the wrist connector of your Cobot for even faster setup times.

- **Suggested payload: 44 lb (20 kg)**
- Four Integrated G1/8" pneumatic pass-through ports.
- Locked position sensing available.
- Optional electrical connector provides 16 screw terminals. See page 181 for equipment to assist in wiring.
- Cobot industry standard ISO-9409-1-50-4-M6 mounting pattern.

Quick#	Part#	Description	Weight	Price
8093	QC75-A	Robot-Side - For Cobots (75mm)	315g	\$402.00
8094	QC75-B	EOAT-Side - For Cobots (75mm)	270g	\$256.00
8095	CMAQC	Robot-Side Electrical Connector	18g	\$36.87
8096	CMBQC	EOAT-Side Electrical Connector	18.5g	\$86.89
8097	CSAQC	Robot-Side Locked Position Sensor Only	15g	\$30.77



Specifications for Quick Changer QC75		
Weight	Robot-Side	315g
	EOAT-Side	270g
Max. Suggested Payload	44 lb (20 kg)	
Maximum Air Pressure	6 bar (87psi)	
Air Ports	(4X) G1/8	
Electrical Connector	Optional	
Safety Loads:		
F	Mt	Mb
224.8 lbf.	110.6 lbf*ft.	36.8 lbf*ft.

F= Axial Load Limit Mt= Torque Moment Limit
Mb= Bending Moment Limit

Manual Quick Changer for Collaborative Robots – QC75

(Dimensioned drawings shown half scale)

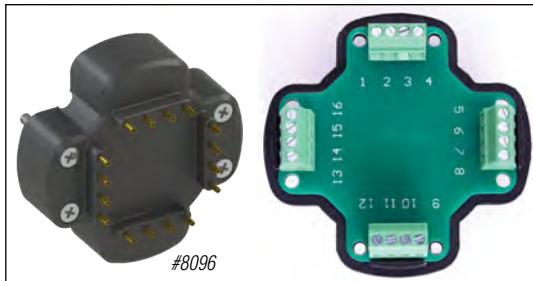


#8094
EOAT-Side

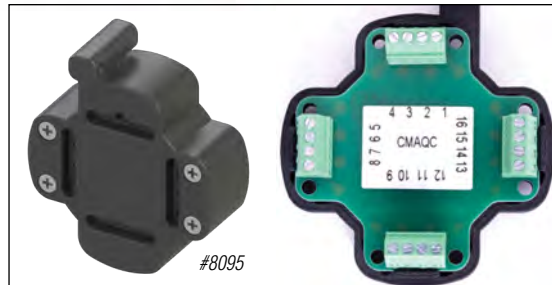


#8093
Robot-Side

- The Quick Changer *standard* for collaborative robots.
- Handles both pneumatic and electrical end effectors.
- Air ports are integrated into the quick changer connection pins (patented) for streamlined pneumatic routing.
- Electrical connectors are integrated into the quick changer housing for streamlined wiring.



#8096



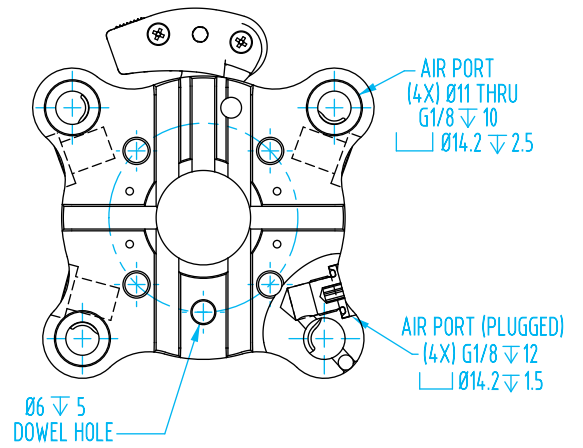
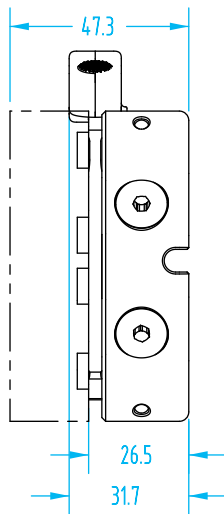
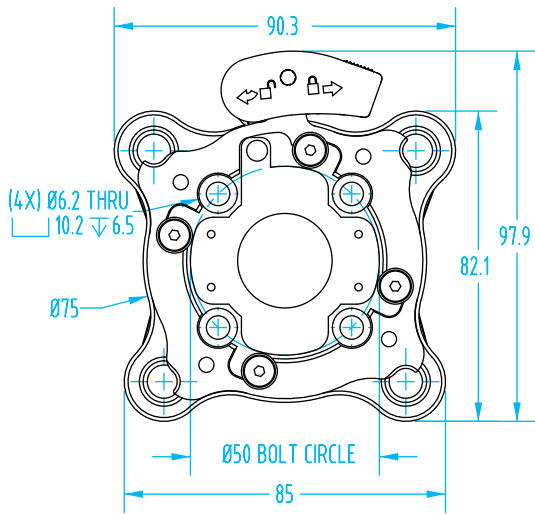
#8095



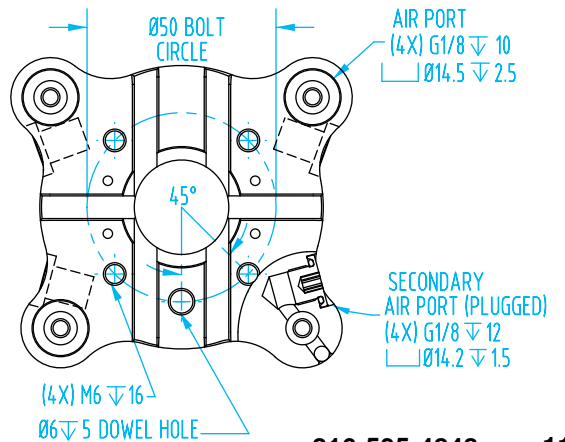
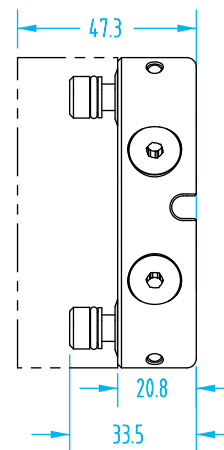
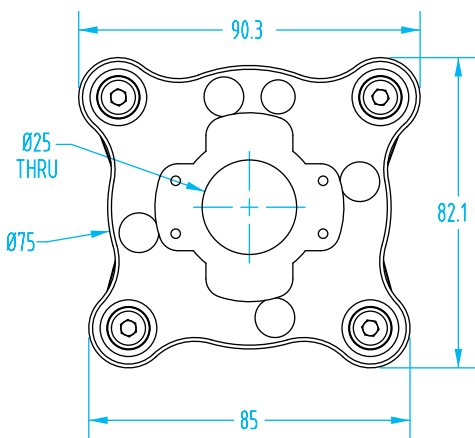
#8097

Easy custom wiring of your EOAT.

Robot-Side



EOAT-Side



Automatic Quick Changer for Cobots – EQC20

The EQC20 is designed to provide a hands- and hassle-free quick-change tool system, automated using resources readily available from your collaborative robot. Numerous model configurations allow for convenient control through the robot wrist I/O or controller, while various available interface plates make for simplified mechanical mounting to the robot flange. Pneumatic pass-through ports are built-in and optional electrical connectors can be positioned in the central thru-hole for a collaborative compliant execution.

- **Suggested payload: 44 lbs (20kg)**
- Six Integrated Ø6mm pneumatic pass-through ports.
- Position confirmation sensing.
- Optional electrical connectors to be positioned in the central through hole. See page 181 for equipment to assist in wiring.
- Separate adapter plates available for ISO 9409-1-50-4-M6 and 9409-1-63-4-M6 interfaces, see page 118.
- Optional docking pins for storage, see page 118.



#8098 – Robot-Side Electric Quick Changer with Female M8 8-pin Connector (configured for UR)

Try It Risk Free!

*Contact us for details



#8151 – EOAT-Side Electric Quick Changer

Gimatic EQC Automatic Quick Changer

NEW

Quick#	Part#	Type	Description	Weight	Price
8098	EQC20U-A	Robot-Side	With Female M8 Connector - For Universal Robots	810g	\$1,552.00
8150	EQC20-A		With Male M8 Connector, PNP	810g	\$1,481.00
8156	EQC20N-A		With Male M8 Connector, NPN	810g	\$1,661.00
8155	EQC20TM-A		With Male M8 Connector - For TM Robots	810g	\$1,661.00
8151	EQC20-B	EOAT-Side	Quick Changer	210g	\$215.00

Gimatic EQC Electrical Connectors

Quick#	Part#	Type	Description	Weight	Price
7600	RMAQC	Robot-Side	Electrical Connector, 32-Pin	70g	\$134.00
7601	RMBQC	EOAT-Side	Electrical Connector, 32-Pin	70g	\$220.00
7703	RMAQC-UR	Robot-Side	Electrical Connector with direct mount for UR, 8-Pin	46g	\$134.00
7711	RMBQC-UR	EOAT-Side	Electrical Connector with direct mount for UR, 8-Pin	51g	\$220.00
7602	RRAQCN	Robot-Side	Electrical Connector, + RFID, NPN, 16-Pin	75g	\$442.00
7603	RRAQC	Robot-Side	Electrical Connector + RFID, PNP, 16-Pin	75g	\$442.00
7604	RRBQC	EOAT-Side	Electrical Connector + RFID, 16-Pin	45g	\$159.00



Watch EMI's EQC and Electrical Connector Videos!



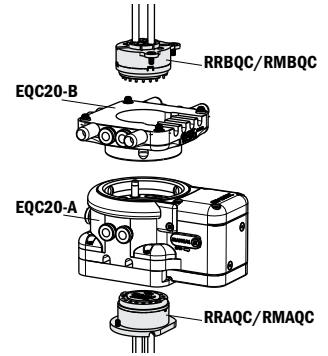
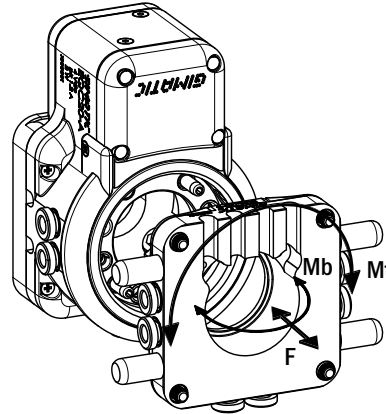
Automatic Quick Changer for Cobots – EQC20

Safety loads

Check the table for the maximum loads allowed. Excessive forces or torques can damage the system, cause operation problems and endanger the safety of the operator.

Specifications for Quick Changer EQC20		
Weight	Robot-Side	810g
	EOAT-Side	210g
Suggested Max. Payload		44 lbs (20 kg)
Maximum Air Pressure		6 bar (87psi)
Air Ports		(6x) Ø6mm
Electrical Connector		Optional
Safety Loads:		
F 449 lbs.	Mt 110 ft-lbs.	Mb 73 ft-lbs.

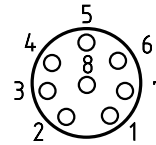
F= Axial Load Limit Mt= Torque Moment Limit
Mb= Bending Moment Limit



**Electrically Controlled,
Cobot Ready!**

Electrical Operation Cable

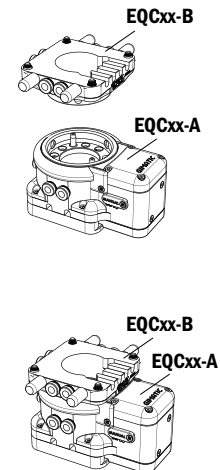
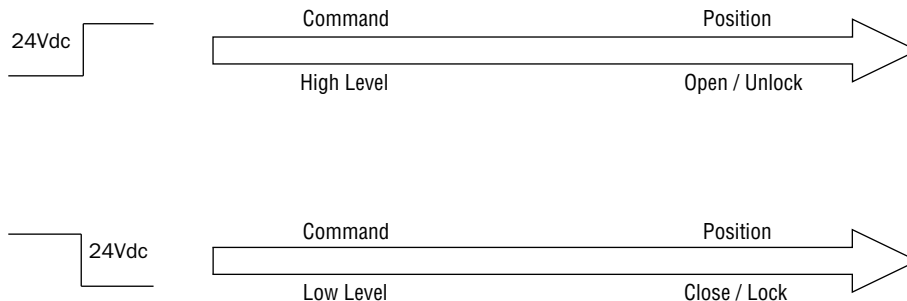
The electrical quick changer is equipped with an M8 8-pin connector for interfacing directly with your power supply and digital controller. This powers the mechanism, provides input control for locking/unlocking the mechanism, and feedback outputs for monitoring position of the mechanism. No additional external electronic control system is required. Various pin-out and plug configurations are available to fit your specific robot, please see our website for more details or contact EMI.



- 1 - White: N/C
- 2 - Brown: N/C
- 3 - Green: Out Closed (PNP)
- 4 - Yellow: Out Opened (PNP)
- 5 - Grey: 24V DC
- 6 - Pink: Open / Close (PNP)
- 7 - Blue: N/C
- 8 - Red: GND

**Note: Q#8150 Pinout shown. Varies by model.*

Technical Specifications



	EQC20
Electrical connection	M8, 8-pole
Power supply	24 Vdc ±10% 0.5 Arms, 1.2 Apk
PNP digital inputs	Low: coupling command High: uncoupling command
Output initialization delay	200 ms

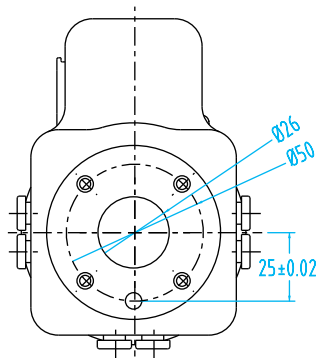
Automatic Quick Changer for Cobots – EQC20

(Dimensioned drawings reduced to fit)

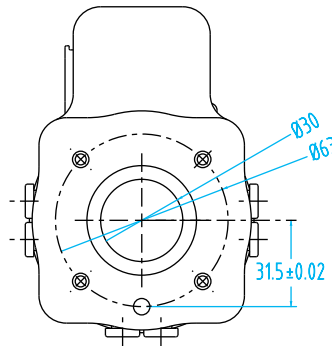
Interface Plates



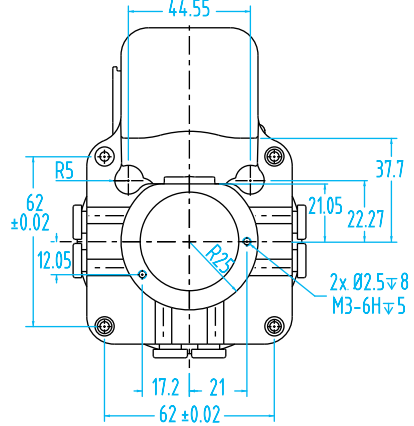
Q#8153 EQC20-K50
ISO 9409-1-50-4-M6



Q#8154 EQC20-K63
ISO 9409-1-63-4-M6



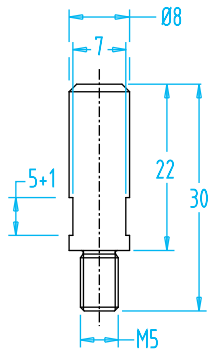
Robot Side EQC20
No Interface Plate Shown



Quick#	Part#	Description	Weight	Price
8153	EQC20-K50	Interface Plate with ISO 9409-1-50-4-M6 interface	120g	\$80.42
8154	EQC20-K63	Interface Plate with ISO 9409-1-63-4-M6 interface	120g	\$73.73
8152	EQC20-K1	Storage Docking Pins for EOAT-Side (x4)	13g	\$37.53

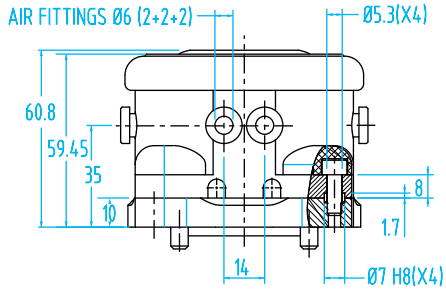
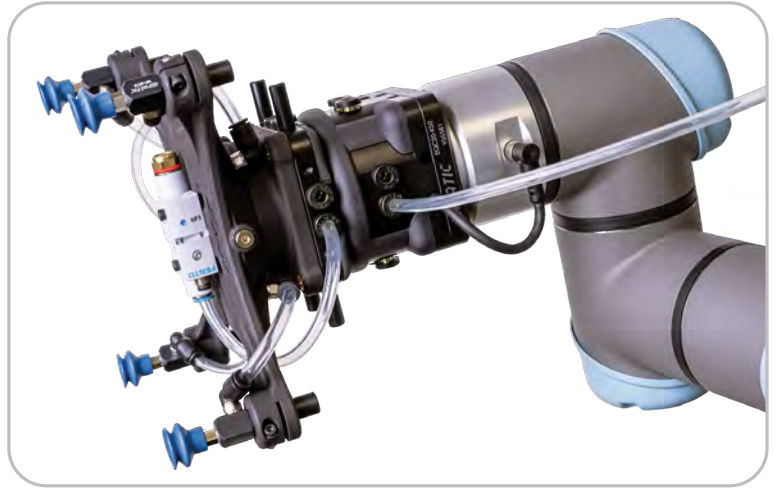
Storage Docking Pins

These pins recommended for storage of your EOAT, and are supplied separately. Contact EMI for a cradle for your EOAT.

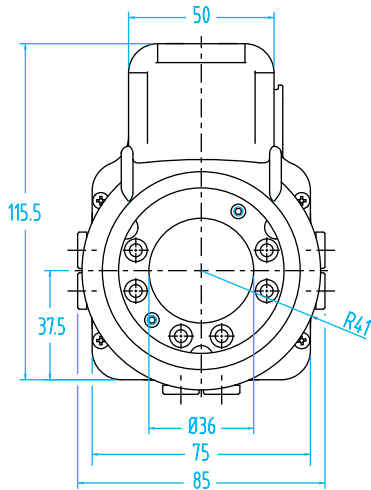


Automatic Quick Changer for Cobots – EQC20

(Dimensioned drawings reduced to fit)



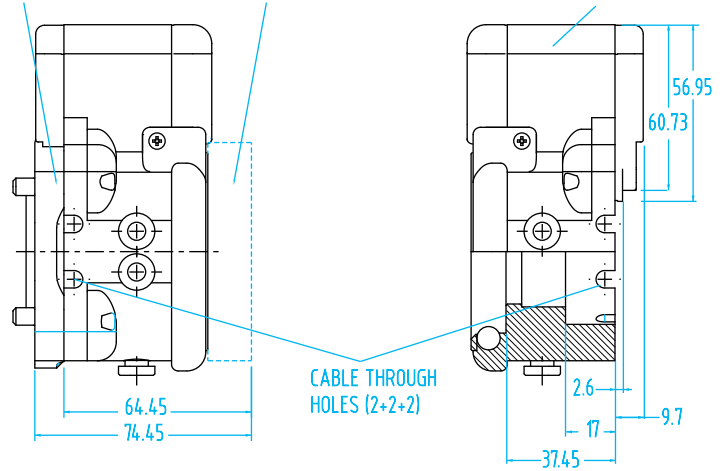
Robot-Sides, #8098, #8150, #8155, #8156



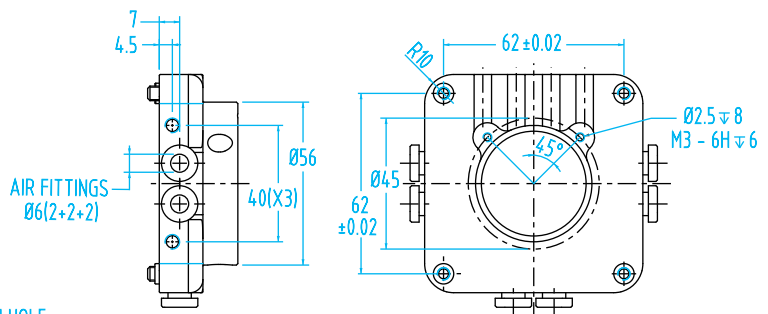
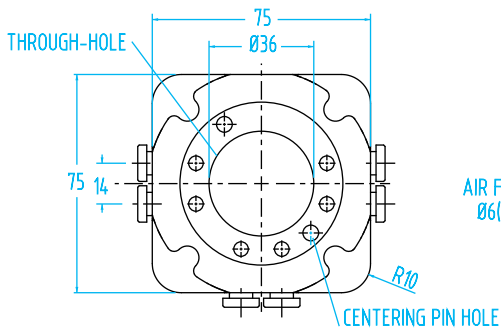
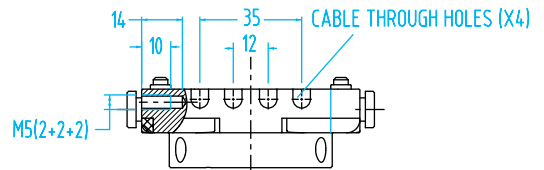
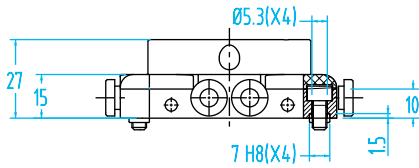
Q#8154, EQC20-K63

Q#8151, EQC20-B

Without interface plate



EOAT Side, #8151



OnRobot Quick Changer for Cobots



#8225
Robot-Side



#8221
EOAT-Side

The Robot-Side Quick Changer enables easy and fast tool changing. It is fully collaborative with no sharp edges, which makes it easy and safe for human interaction. The Quick Changer can handle up to a 44 lbs (20kg) payload and has a low built-in height and weight.

Compatible with eSeries UR, and any other cobot that uses the ISO-9409-1-50-4-M6 mounting pattern and can be easily adapted to even more robots.

Built into every OnRobot gripper, the EOAT-Side Quick Changer is now available for all EOAT which makes it easy to click into your cobot. With a 20kg max. payload, this quick changer is a simple way to swap your EOAT in between applications.

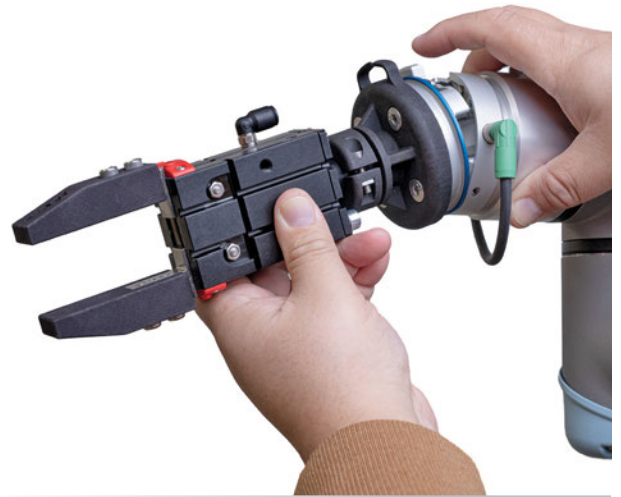
Use with pneumatic grippers, degating kits, or any third party product compatible with ISO-9409-1-50-4-M6 bolt pattern.

Quick#	Part#	Description	Weight	Price
8225	OR-QCA1*	Robot-Side	58.9g	\$588.00
8221	OR-102014	EOAT-Side	140g	\$588.00

*Not compatible with CB3 series UR, see #8224 below.
OnRobot pricing effective 3/1/2024 and subject to change.

8224	OR-102326	Robot-Side for CB Series	95.2g (0.21lb)	\$700.00
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Technical Specs	
Maximum permissible force	90 lbf
Maximum permissible torque	442 in-lb
Rated payload	44 lb (20 kg)
Repeatability	+/- 0.02mm



M8 8-Pin Tool Flange

Quick#	Part#	Description	Price
8230	OR-102113*	M8 8-Pin Female Tool Flange for UR	\$95.00
8237	OR-107456**	M8 8-Pin Female Tool Flange for Fanuc CRX	\$95.00

*Required to use Q#8220/8225 Quick Changer on eSeries UR and Q#8224 Quick Changer on previous (CB3) UR models to connect directly to the Tool I/O M8 connector.

**Required to use Q#8220/8225 on Fanuc CRX Tool I/O M8 connector.



Wingman Automatic Quick Changer for Cobots!

Click here for more information!

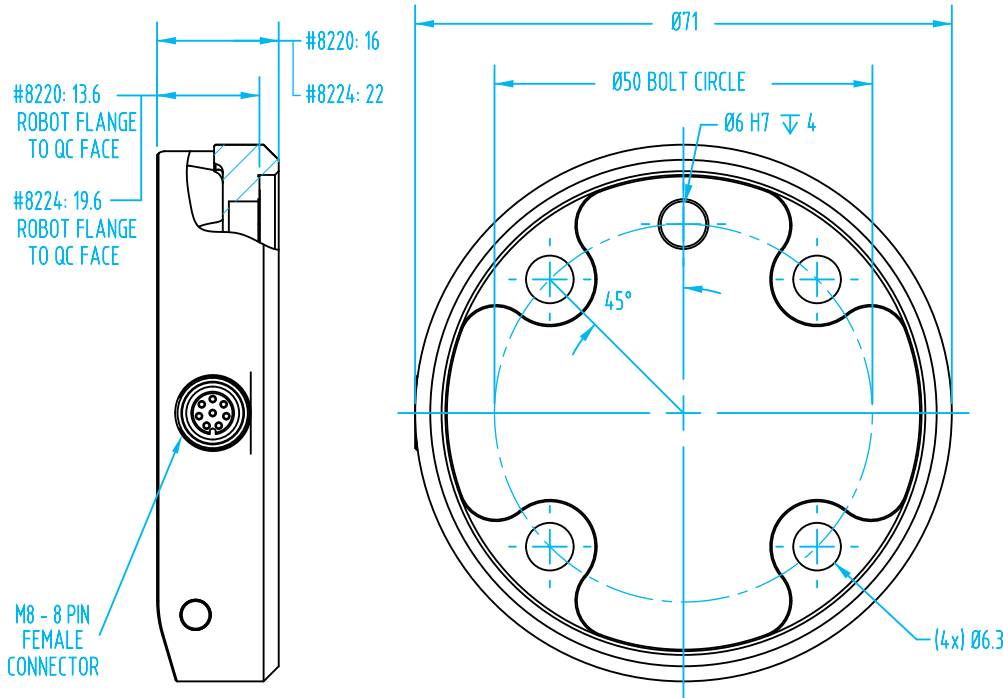


OnRobot Quick Changer for Cobots

(Dimensioned drawings shown full scale)

Robot-Side

- #8225 & #8224: M8 8-Pin Female Tool Flange Connection Q#8230 required for UR Robot.
M8 8-Pin Male Tool Flange Connection Q#8237 required for Fanuc CRX Robot.
- #8225 & #8224: Have the same dimensions except for the overall height as noted below.

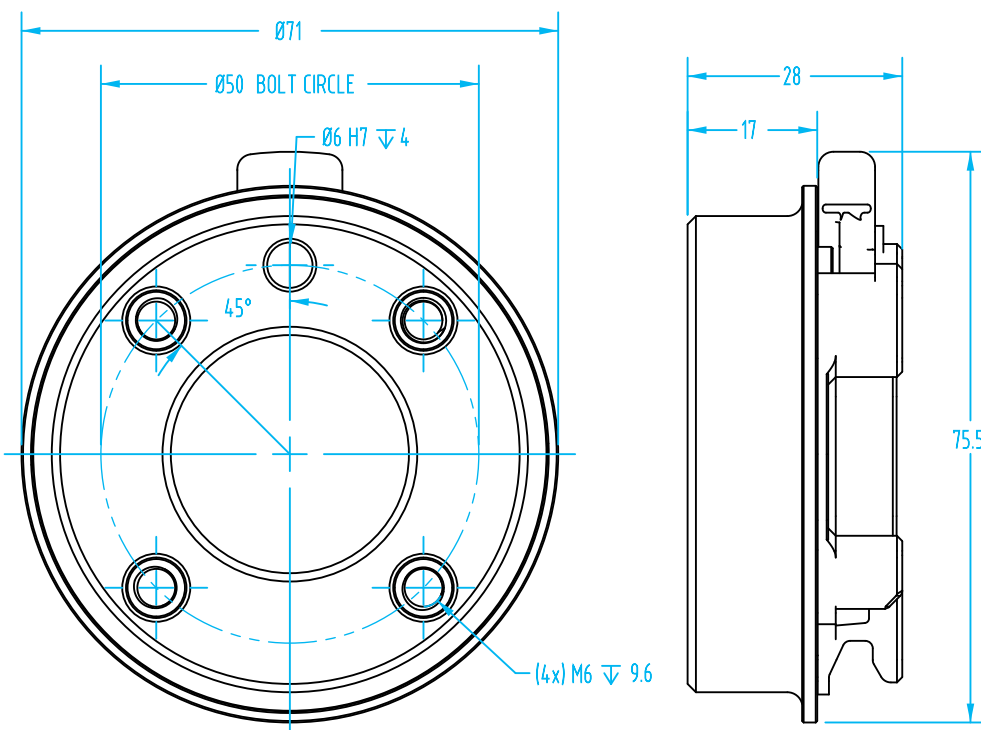


#8224
Robot-Side, for CB Series UR
Not compatible with eSeries UR



#8225
Robot-Side, 4.5a compatible

EOAT-Side



#8221
EOAT-Side

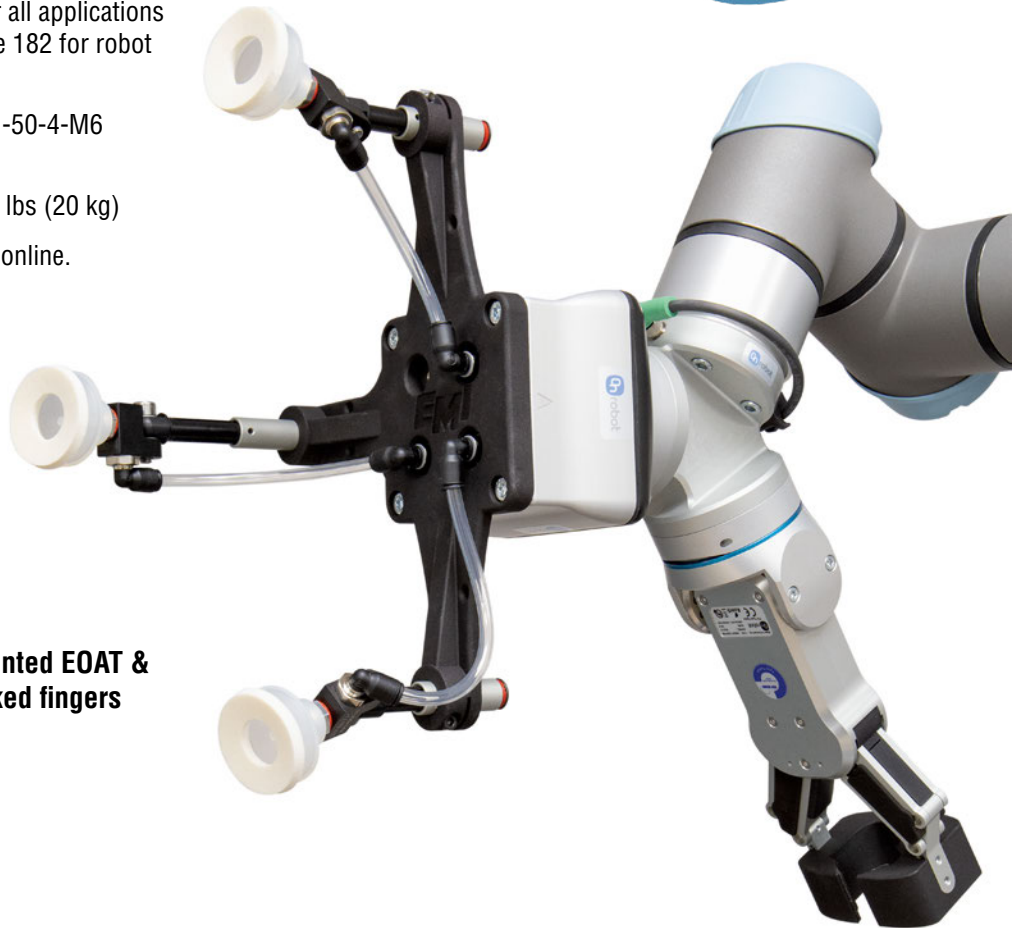
OnRobot Dual Quick Changer for Cobots

The Dual Quick Changer enables you to use two end-of-arm tools together in a single cycle. With this innovative solution you can use two grippers or vacuum units. Quickly and seamlessly switch between tools to maximize the utilization of your robots.

Quick#	Part#	Weight	Price
8222	OR-101788	410g	\$2,781.00

OnRobot pricing effective 3/1/2024 and subject to change.

- Easy and fast change of tools.
- High repeatability.
- Requires a Compute Box for all applications and robot models. See page 182 for robot specific Compute Boxes.
- Compatible with ISO 9409-1-50-4-M6 mounting interface.
- Max. suggested payload: 44 lbs (20 kg)
- Dimensional drawing found online.



Custom 3D printed EOAT & RG2 with flocked fingers

Cable Relief for Dual QC

Quick#	Part#	Price
8242	OR-102919	\$86.67



- Direct OEM replacement of the 3D printed cable relief found on Q#8222 dual quick changer for Cobots.
- Contact EMI if you need additional cable management solutions for your Cobot.

OnRobot Hex-E Quick Changer Force/Torque Sensor



Try It Risk Free!

*Contact us for details

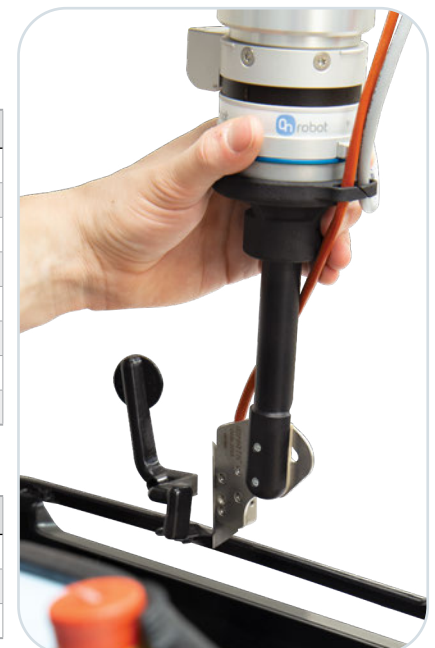


Quick#	Part#	Wt.	Price
8223	OR-102111	347g	\$4,342.00

- Plastic applications include degating, and insert loading using the advanced control and force feedback.
- Common applications are polishing, sanding, deburring, grinding and assembly, but it can also be used for teach-in and crash detection.
- Unique optical based technology allows for high precision and repeatability.
- Keeps constant force while moving.
- Easy to use interface, no programming skills are needed (UR only).
- Requires a Compute Box for all applications and robot models. See page 182 for robot specific Compute Boxes.

OnRobot's 6-axis force torque sensor provides an accurate force and torque measurement along all 6 axes. This gives you precise control when it comes to difficult jobs. Additionally, the HEX software includes path recording, force control (on UR and Kuka) and special features for insertion tasks (UR only). This means reduced integration time for your production line. The sensors are designed to fit most of the current industrial robot arms.

Utilizing the included URcap HEX commands, you can teach your robot the exact location, force and speed of operations such as **insert-loading** and **degating** of larger gates.



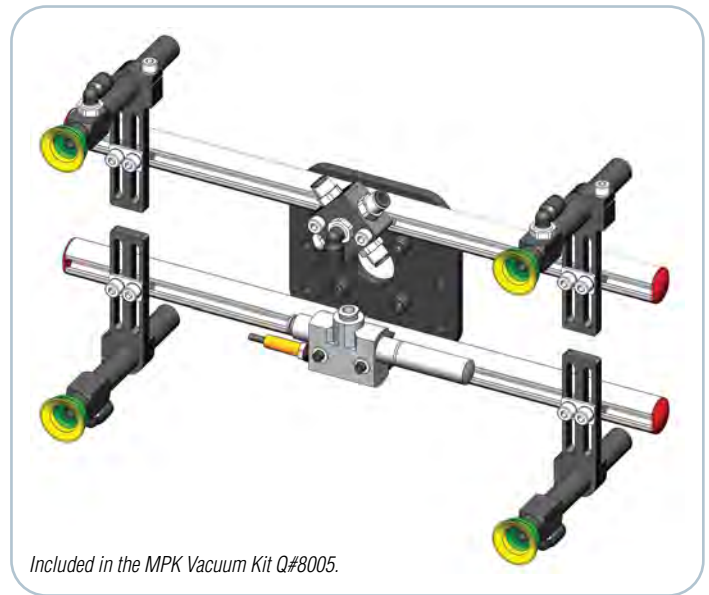
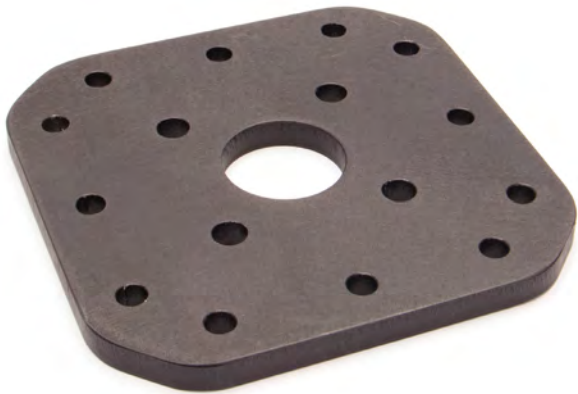
Technical Specs	Fx & Fy	Fz	Tx & Ty	Tz
Nominal capacity (N.C.)	200 N	200 N	10 Nm	6.5 Nm
Single axis deformation at N.C. (typical)	±1.7mm	±0.3mm	±2.5mm	±5mm
Single axis overload	500%	500%	500%	500%
Signal noise* (typical)	0.035 N	0.15 N	0.002 Nm	0.001 Nm
Noise-free resolution (typical)	0.2 N	0.8 N	0.01 Nm	0.002 Nm
Full scale nonlinearity	< 2%	< 2%	< 2%	< 2%
Hysteresis (measured on Fz axis, typical)	< 2%	< 2%	< 2%	< 2%
Crosstalk (typical)	< 5%	< 5%	< 5%	< 5%

* Signal noise is defined as the standard deviation (1sigma) of a typical one second no-load signal.

Operating Conditions	
Power supply	7V- 24V
Maximum current consumption	0.8W
Operating temperature	32° - 131°F

Interface Plate for DIY EOAT

(Dimensioned drawings shown full scale)

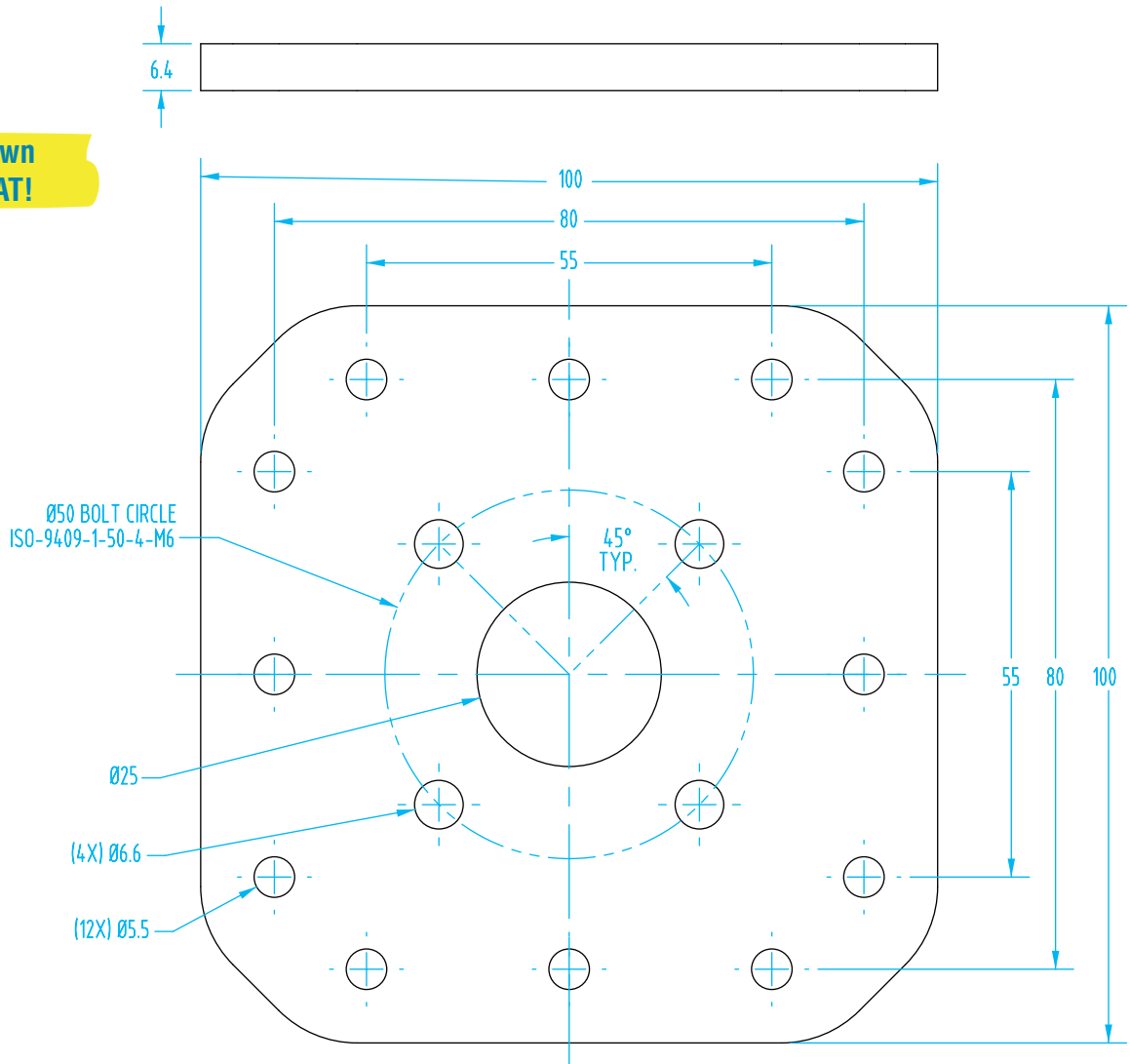


Included in the MPK Vacuum Kit Q#8005.

Quick#	Part#	Price	Wt.
8058	CRM-0138-2A	\$28.13	151g

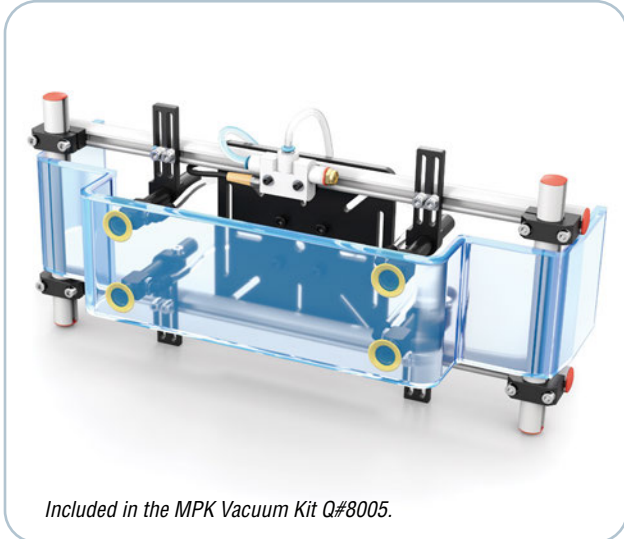
- Lightweight aluminum plate compatible with the ISO-9409-1-50-4-M6 mounting pattern.
- Can be manufactured to fit any Cobot.

Build your own Vacuum EOAT!



Interface Plate for DIY EOAT

(Dimensioned drawings shown half scale)

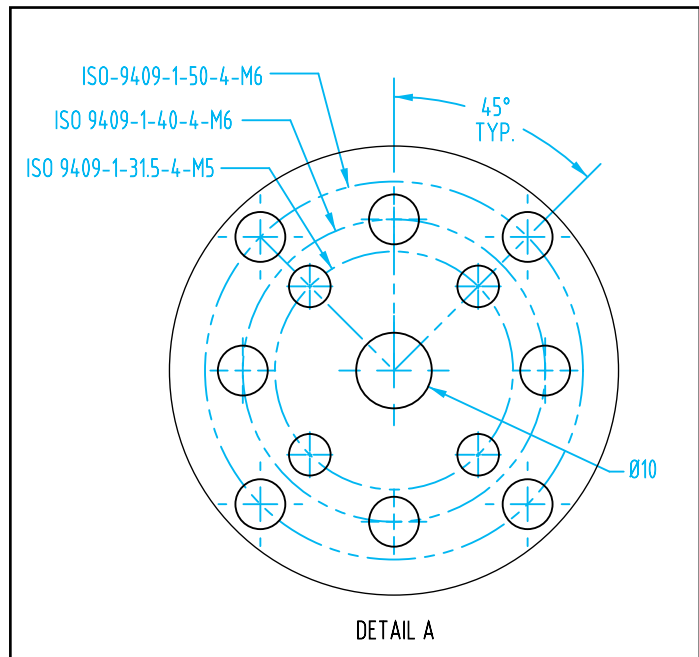


Included in the MPK Vacuum Kit Q#8005.



- Lightweight aluminum plate compatible with ISO 9409-1-31.5-4-M5, ISO 9409-1-40-4-M6, and ISO-9409-1-50-4-M6 mounting patterns.
- Slots allow for quick adjustments.
- See EMI website for full dimensional drawing.

Quick#	Part#	Price	Wt.
8057	CRM-0138-1A	\$31.85	324g



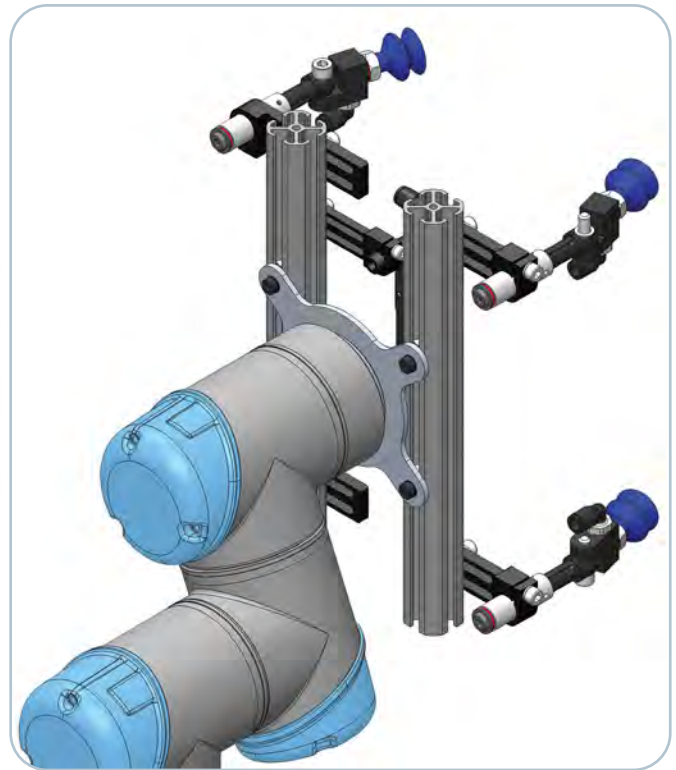
90° Angle Offset Bracket for Cobot Grippers

Quick#	Part#	Price
8279	OR-105870	\$233.33

- Can mount to any robot with ISO-9409-1-50-4-M6 mounting pattern.
- Compatible with any gripper that mount to the robot wrist.
- More information online!

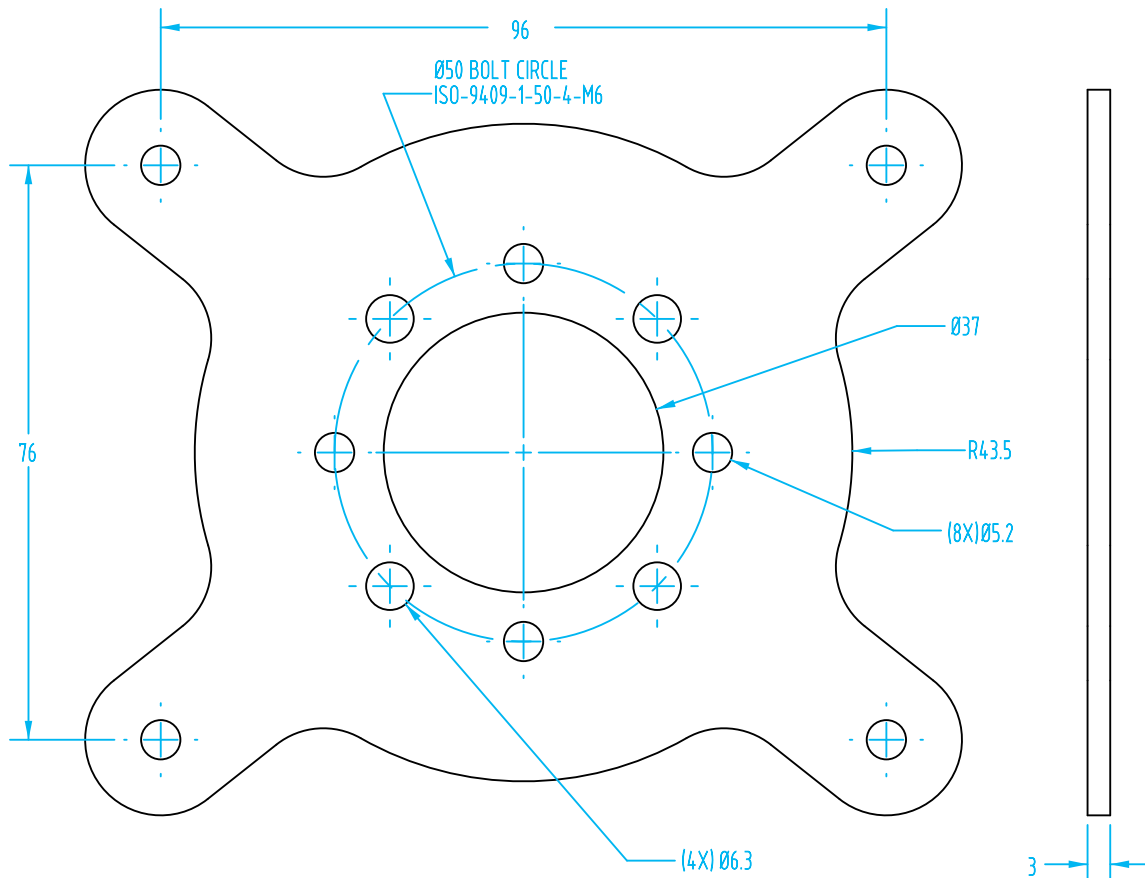
Quick Changer Interface for DIY EOAT

(Dimensioned drawings shown full scale)



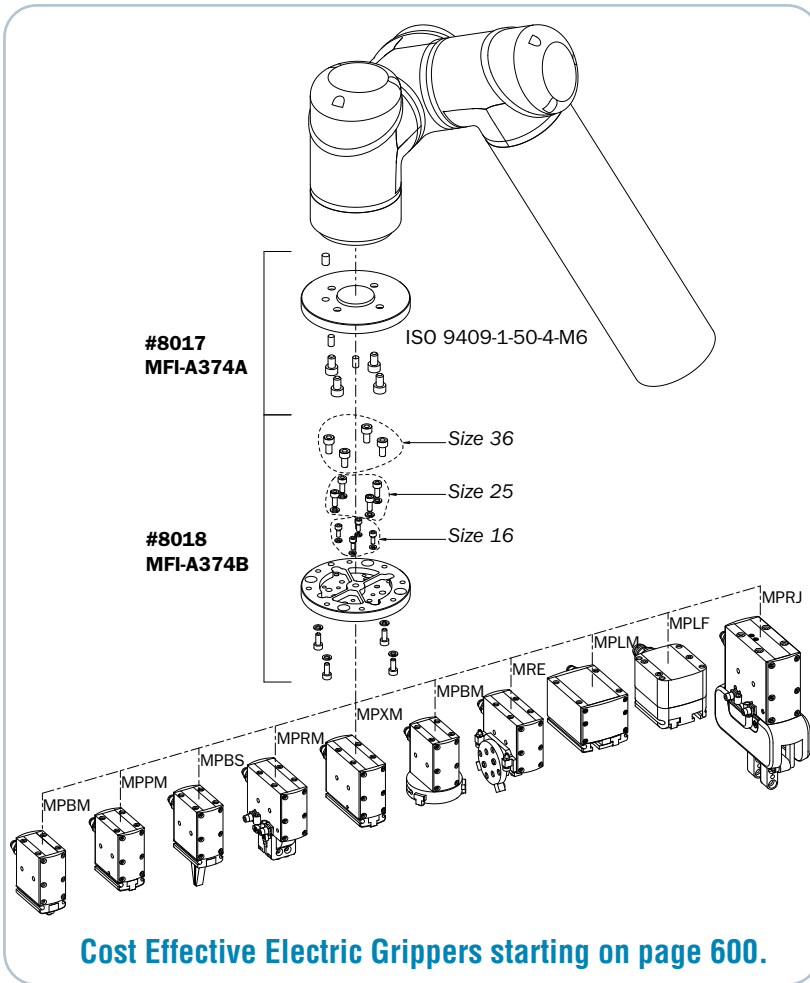
Quick#	Part#	Price	Wt.
7435	MFI-A372	\$29.29	218g

- Steel plate is compatible with the ISO-9409-1-50-4-M6 mounting pattern.
- Mounts directly to Quick Changers.
- Hardware included.



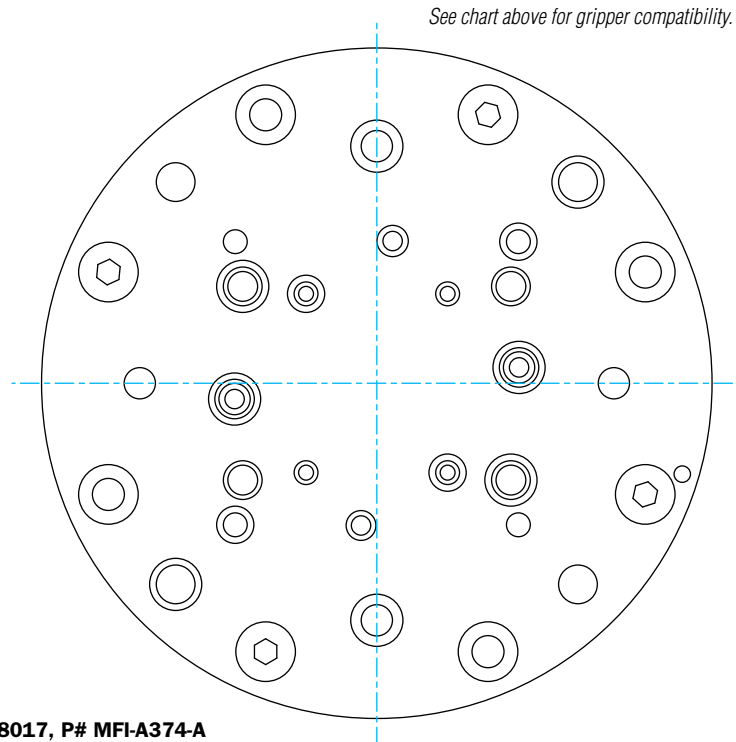
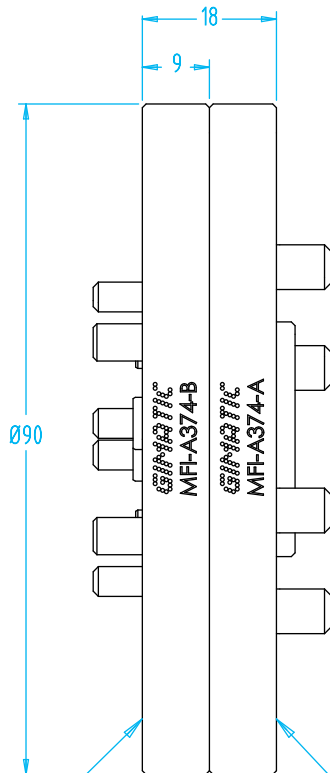
Interface Plates for Gimatic Electric Grippers

(Dimensioned drawings shown full scale)



Quick#	Part#	Price	Wt.
8017	MFI-A374A	\$62.50	50g
8018	MFI-A374B	\$83.00	55g

- Compatible with the ISO-9409-1-50-4-M6 mounting pattern.
- Hardware included.



Q# 8018, P# MFI-A374-B
Gripper side

Q# 8017, P# MFI-A374-A
ISO 9409-1-50-4-M6 Robot side

EMI Modular Vacuum Kit – MPK

Everything You Need To Get Your Cobot Up
And Running For Vacuum Applications.

Best Seller!

Quick# 8005
CRK-MPK1-A
KIT PRICE: \$995.00



Modular MPK Vacuum Kit

- Modular, lightweight aluminum frame with two anodized aluminum mount plates.
- 3 Sets of vacuum cups included: High Temperature Silicone, Non-Marking Hithane and Dual Durometer.
- Includes an integrated Vacuum Generator with a monitoring switch for part confirmation.
- **Up to 450mm x 450mm footprint!**
- Compatible with our existing line-up of EOAT components.
- Includes EMI's URcap and sample CAD models for easy assembly and programming.
- Compatible with the ISO-9409-1-50-4-M6 mounting interface.
- Compatible with QC75 and QC90 quick changers.



Also available for Sawyer
and other Cobots!

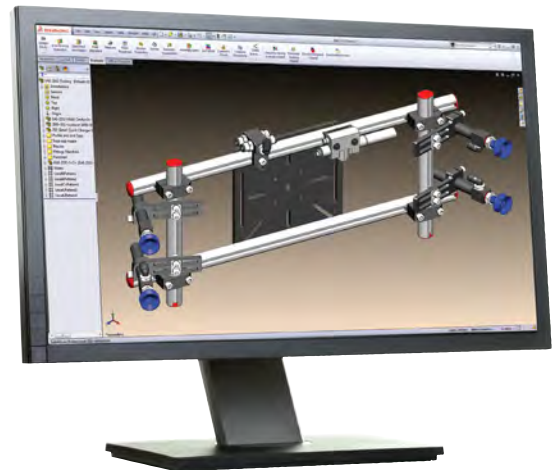
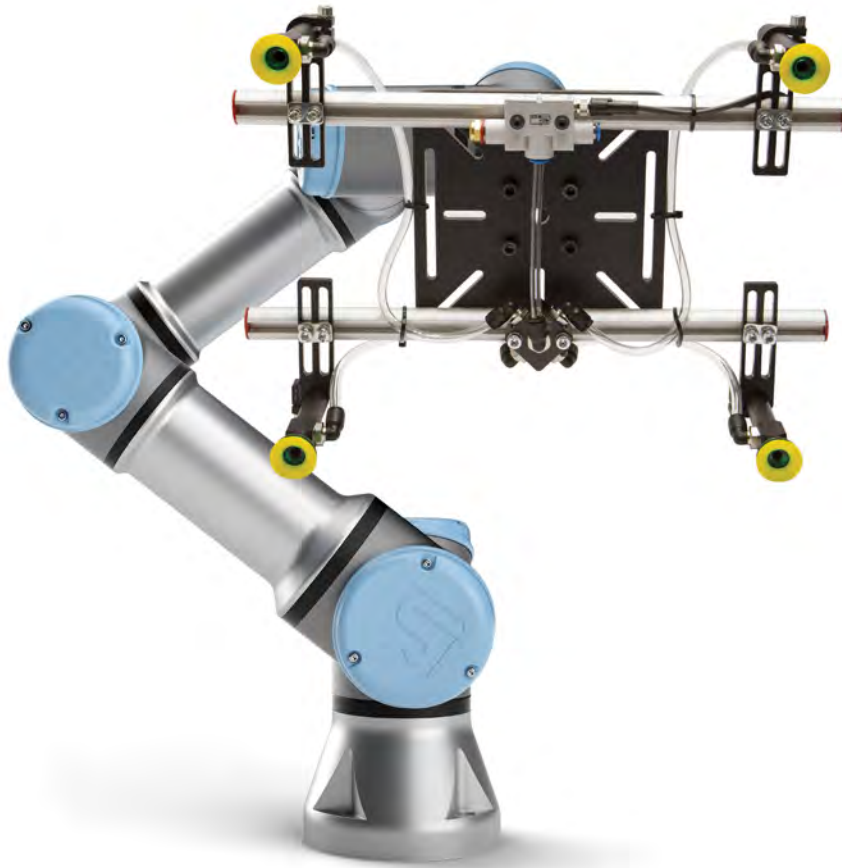
EMI Modular Vacuum Kit – MPK

Large Footprint or Compact Configuration!

Completely modular and lightweight, the MPK is a great starting point for most vacuum applications and can easily be expanded with EMI's complete line up of EOAT framing, suspensions, grippers, vacuum cups, and more. All in stock and ready to ship with a team of Engineers ready to assist you with your application.



Includes USB drive with literature and robot software plug-in.



Includes sample EOATs to get you started!



Quick# 8016

5/2 Solenoid valve with fittings, muffers, and non-slip Velcro® strap.



Quick# 8015

Two cable management clamps with non-slip Velcro strap.



#8091 with silencer #8069

Vacuum generator with monitoring switch for part confirmation.



Easy to assemble and modify!
Contact us with any questions.

EMI Modular Vacuum Kit – MPK 2

Designed with the best vacuum components to meet the requirements of packaging applications, and the convenience to modify when needed.

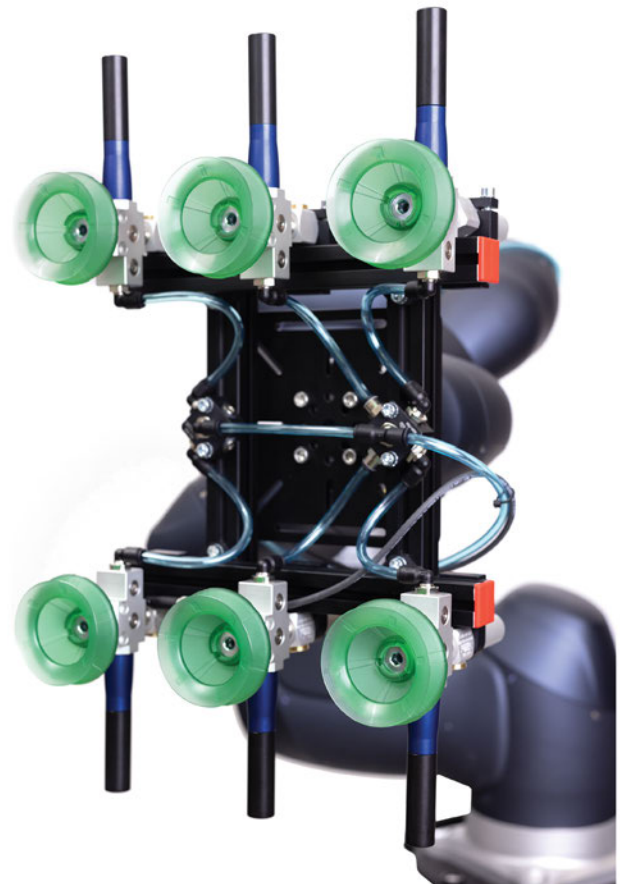
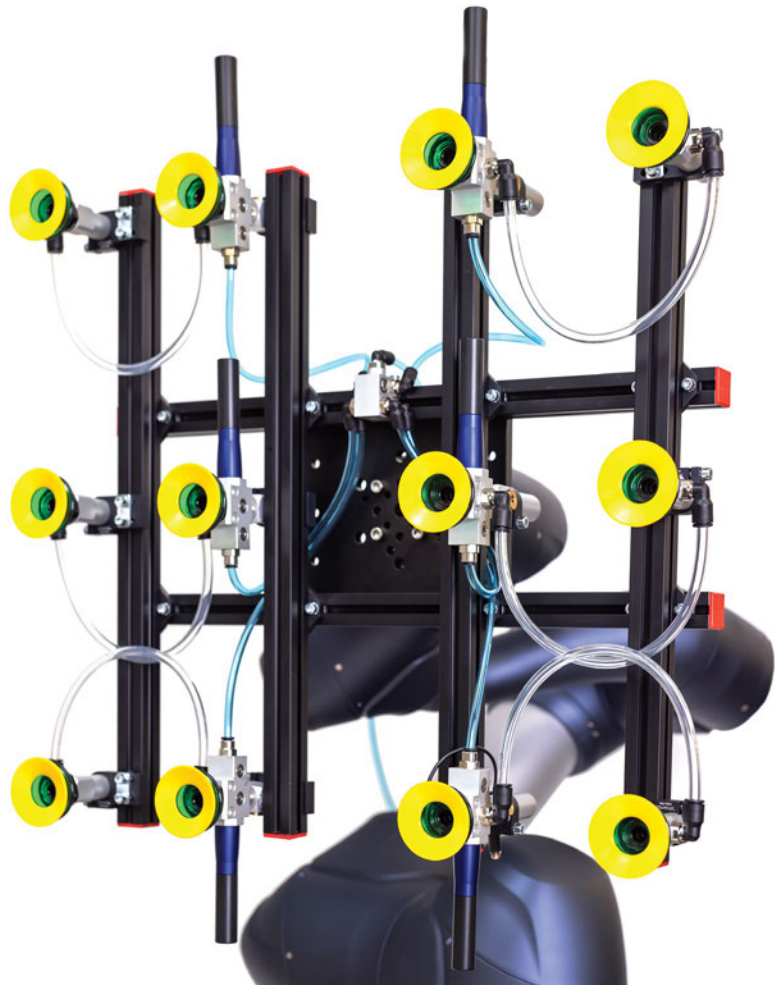
Expanding on EMI offering of vacuum automation products and solutions, our engineers have put together a kit to handle porous materials commonly used in packaging applications. With de-centralized vacuum generators, industry-leading vacuum cups, framing and two mounting plate options, this Kit is a great starting point for your Collaborative Robot to be deployed.

Quick# 8004
CRK-MPK2-A
KIT PRICE: \$2,998.00

Modular MPK 2 Vacuum Kit:

- Modular, lightweight aluminum frame with two anodized aluminum mount plates.
- Two sets of vacuum cups included: PIAB® Duraflex Dual Durometer and Schmalz® Elastodur Dual Durometer.
- Includes an integrated high-flow vacuum generator with a monitoring switch for part confirmation.
- Up to 500mm x 500mm footprint!
- Compatible with our existing line-up of EOAT components.
- Includes EMI's robot plugin and sample CAD models for easy assembly and programming.
- Compatible with multiple cobot mounting interfaces.
- Compatible with QC75 and QC90 quick changers.

Easily modify configurations when your application changes!



EMI Modular Vacuum Kit – MPK 2

Quick# 8004 has been tested for payloads up to 20kg, however, keep in mind that this is very dependent on the material being handled and testing is encouraged.

If you need support from our engineers, contact cobots@emicorp.com to get started with your vacuum packaging application.



3D Printed Vacuum EOAT for Cobots – 3D-V



The development of the 3D-V Vacuum Kit stems from years of successful implementation of 3D printed components to compliment custom End-of-Arm Tools.

The 3D-V Vacuum Kit is easy to install, operate, and is ready to expand the capabilities of your Collaborative Industrial Robot.

Quick#8000 – 3D-V (as shown)

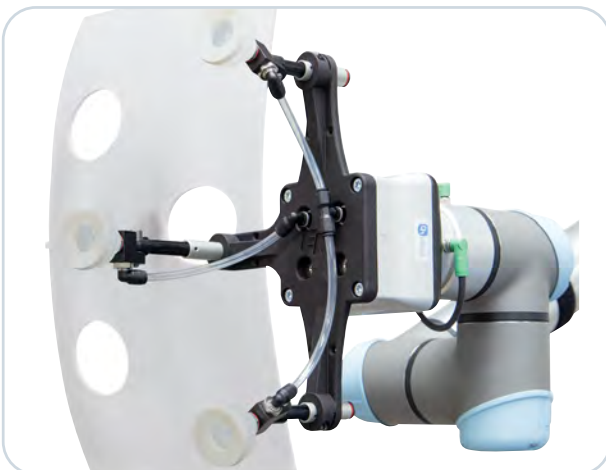
KIT PRICE: \$895.00*

*price subject to change per configuration



3D-V Vacuum Kit:

- Fully Customizable: (1–16) Vacuum cups with variable spacing.
- Available with any vacuum cup from our catalog. Shown with industry standard Hithane vacuum cups above.
- Available with an integrated vacuum generator with a monitoring switch for part confirmation.
- Lightweight 3D printed frame made out of durable nylon.
- Up to 375mm x 275mm.
- Each 3D-V Vacuum Kit is designed for your specific application.
- Supply with compressed air.



Large sample 3DV can hold up to 10kg. Payload can vary by configuration.

3D Printed Vacuum EOAT for Cobots – 3D-V

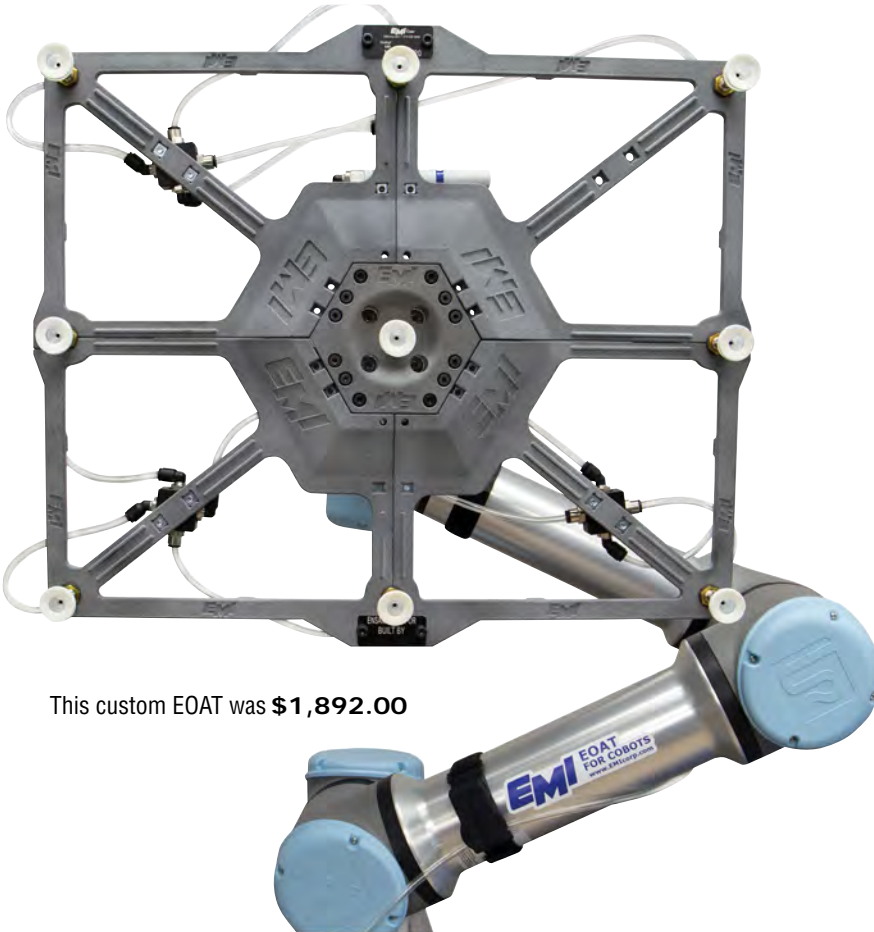
Can Mount to Any Robot!



Includes USB drive with literature and robot software plug-in.



EMI's 3D-V Datasheet for ordering, available at www.EMICorp.com.



This custom EOAT was **\$1,892.00**

3D-V Gripper Kit Includes:



Quick# 8016

5/2 Solenoid valve with fittings, muffers, and non-slip Velcro® strap.



Quick# 8015

Two cable management clamps with non-slip Velcro strap.



#8091 with silencer #8069

Vacuum generator with monitoring switch for part confirmation.



Hardware to mount your cobot or quick changer.

Gimatic Vacuum EOAT for Cobots – KIT-UR-V

Gimatic's KIT-V for Universal and Techman Robots is a modular and durable vacuum end effector. A lightweight, extruded aluminum frame offers versatility so it can be used for different tasks with minimal setup time.



Quick# 8011
KIT-UR-V

PRICE: \$726.⁰⁰



Gimatic by EMI KIT-UR-V & KIT-TM-V

End Of Arm Tool (EOAT) for vacuum based pick & place operations. The included pneumatic actuator allows for a direct connection to the robot wrist. KIT-UR-V includes a user manual and URCap.

The KIT-TM-V is designed for Techman Robot cobots (TM5, TM12 and TM14 series). This kit is completely compatible with Gimatic EQC20-TM (Quick#8155) and it can be used in combination with any collaborative robot that provides a limited power supply capability at the wrist.

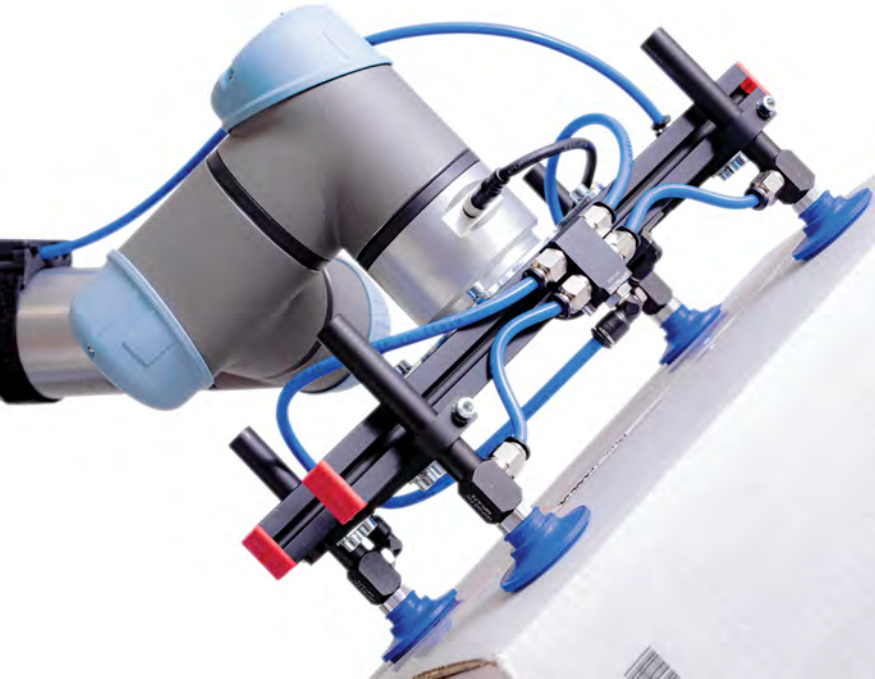
Find the right vacuum cup for your application!
See our Vacuum Cup Overview pages 322–323.

Quick# 8030
KIT-TM-V

PRICE: \$726.⁰⁰

TMPlug&Play
CERTIFIED

Gimatic Vacuum EOAT for Cobots – KIT-UR-V

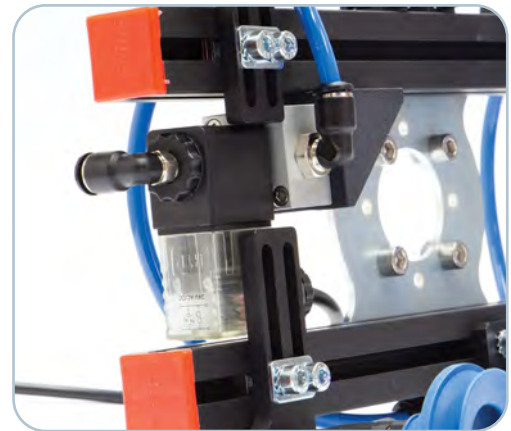


Look familiar? EMI EOAT components can be easily adapted to any robot.

**Pre-Assembled
and Reliable!**

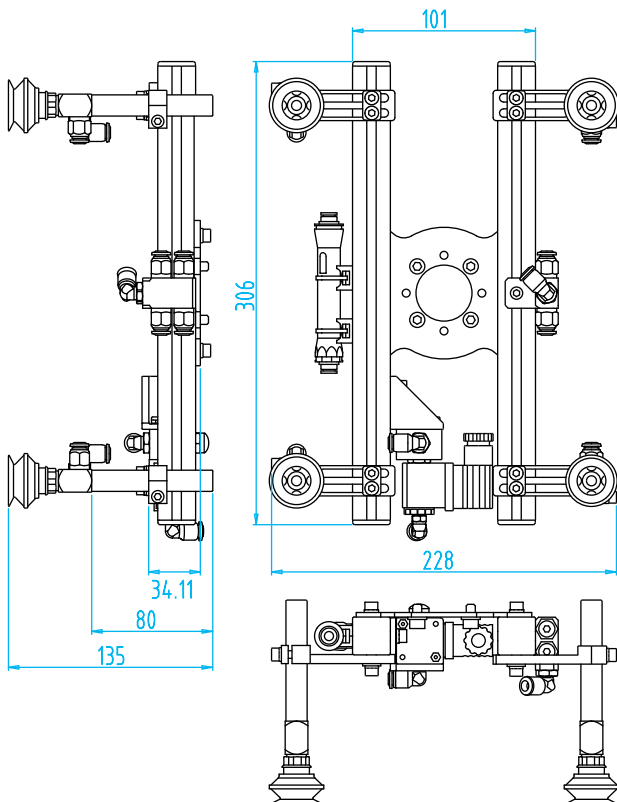
Features:

- Delivered fully assembled, and easy to adjust.
- Compatible with UR3(e), UR5(e), UR10(e).
- Directly connects to the wrist of the robot.
- Plug & play solution.
- Embedded vacuum generator and solenoid valve.
- Delivery with standard HNBR vacuum cups. Contact EMI for different vacuum cups.
- User manual and Gimatic URCap included.

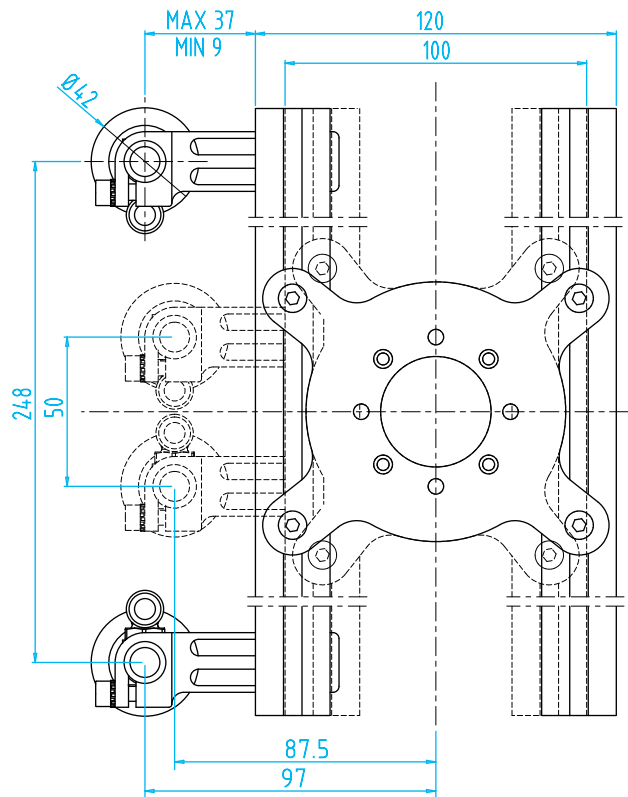


Embedded vacuum generator and solenoid valve.

Dimensions (mm):



Adjustments (mm):





Custom and Plug-and-Play Solutions for your Cobot

Vacuum Gripper Kits

Vacuum is the most effective way of handling molded parts and EMI offers everything you need for a plug and play solution. EMI stocks the largest selection of Vacuum EOAT kits and components.

EMI Gripper Kits

EMI offers a wide array of handling gripper kits to meet your application needs, budget and Cobot platform. Every kit is in-stock and can be customized, expanded or simplified according to your specifications.

Cobot Accessories

Our Cobot Accessories are compatible with a wide range of robot platforms. EMI Solenoid Valve, Vacuum Generator and Cable Management kits are a cost effective, practical way to enhance your Collaborative Robot.

Cobot Stand

EMI Cobot Stands extend the reach of your robot arm. In-stock and cost-effective, these heavy-duty pedestals come in various heights and are available with a mobile base. Perfect for industrial environments.

Cobot Ready Conveyors

Cobot Ready Conveyors from EMI easily interact with your robot to provide continuous part transfer. Ideal for pick and place, machine tending and packaging, these conveyors are designed and manufactured to order.





OnRobot VGC10 Customizable Electric Vacuum Gripper



Electric Vacuum Generator with 33 lbs payload, dual vacuum channels, and built-in quick changer is ideal for injection molded parts. Use your existing EOAT components to frame an EOAT that can run anywhere in your plant. **No Compressed Air Required!**

Quick# 8211
OR-102844
PRICE: \$3,709.00

OnRobot pricing effective 3/1/2024 and subject to change.

Try It Risk Free!

*Contact us for details



Features:

- Two independent LH/RH air channels for dual gripping are helpful for handling plastic molded parts.
- Flexible electric vacuum gripper with unlimited customization fits all your application needs.
- Compact, lightweight gripper is perfect for tight spaces but with plenty of power for objects up to 15kg.
- Built-in electric vacuum generator.
- No external air supply needed.
- Integrated software.
- Dimensional drawings and further technical information can be found on EMI's website.

Technical Specs	
Vacuum	5%– 80% Vacuum (1.5Hg – 24Hg)
Air flow	12 L /min (0.42 CFM)
Max. payload w/ default attachments*	13.2 lb (6 kg)
Max. payload w/ custom attachments*	33.1 lb (15 kg)
Gripping time	0.35 seconds
Releasing time	0.20 seconds
Weight	814g (1.79 lb)
Power supply	20.4V – 28.8V
Current consumption	50mA – 1500mA
Operating temperature	32° – 122°F

* When using three 40mm cups (more info in the table). Number of cups needed for non-porous materials varies depending on payload and vacuum.

Box Includes:

- VGC10
- Mounting plate
- 15mm Vacuum cup (x 8)
- 30mm Vacuum cup (x 6)
- 40mm Vacuum cup (x 4)
- Vacuum post (x2)
- G1/8" Vacuum cup nipple (x10)
- 6mm Push-in fitting (x4)
- G1/8" Plug (x4)
- M6 x 10mm screw (x4)
- 3mm Hex key
- Torx T30 key



#8271

Hithane Cups:
Industry Standard!
See page 326.

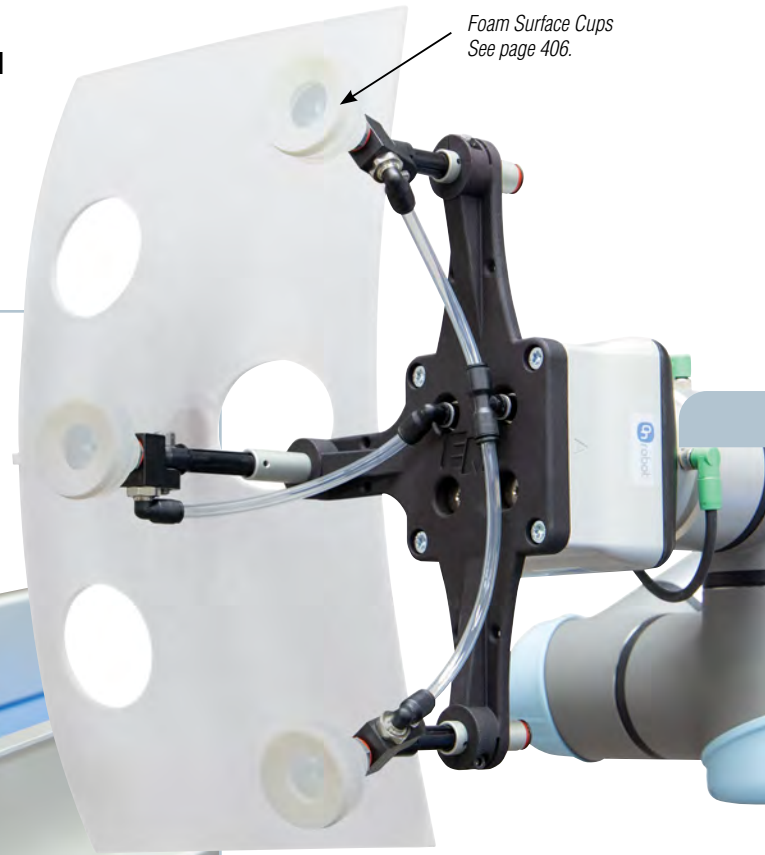
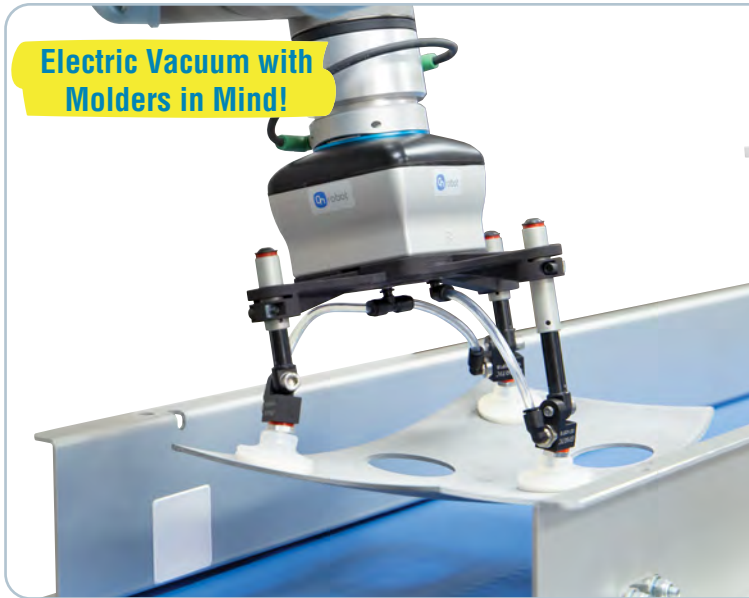


*Shown with custom framing.

OnRobot VGC10 Customizable Electric Vacuum Gripper

Custom 3D Printed EOAT and Cobot Ready Conveyor by EMI

EMI's Cobot Ready Conveyors are designed to be integrated with your Universal Robot to provide continuous part transfer and are ideal for pick and place, machine tending, and packaging applications.



Foam Surface Cups
See page 406.

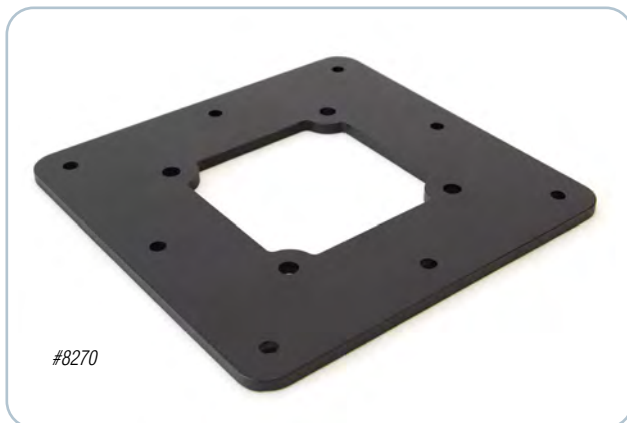
Custom mounting plates and EOAT by EMI

Have a specialty application that requires a custom vacuum gripper? Contact us to discuss! In-stock mounting plates are also available.

VGC10 Mounting Plates for EOAT

Quick#	Part#	Description	Wt.	Price
8271	CRM-0241-VGC10-4	Collaborative EOAT Plate	105g	\$41.84
8270	CRM-0241-VGC10-1	Laser Cut EOAT Plate	225g	\$23.45

Dimensional Drawings found online at: www.EMICorp.com
Search and Order by Quick#



OnRobot VG10 Electric Vacuum Gripper with Dual Zone



Built on the VGC10 platform, this unit has the same features plus built-in swiveling arms that can house up to 16 vacuum cups on a 400mm footprint.

The next generation Vacuum EOAT for the Plastics Industry!

Quick# 8210
OR-101661
PRICE: \$6,022.00

OnRobot pricing effective 3/1/2024 and subject to change.

Try It Risk Free!

*Contact us for details



Features:

- Two independent LH/RH air channels for dual gripping is helpful for handling plastic molded parts.
- No external air supply required.
- Seamless integration with the robot of your choice.
- Integrated software.
- Configurable vacuum cups on four swivelling arms, up to 16 cups can be used with 8 per vacuum channel.
- Built-in electric vacuum generator.
- Dimensions (folded): 105mm x 146mm x 146mm tall. Dimensions (unfolded): 105mm x 390mm x 390mm tall. Full dimensions and specifications can be found on EMI's website.

Technical Specs	
Vacuum	5%– 80% Vacuum (1.5Hg – 24Hg)
Air flow	12 L /min (0.42 CFM)
Arms adjustment	0° – 270°
Arm holding torque	6 Nm (4.4 ft-lbf)
Maximum rated payload	33 lb (15 kg)
Gripping time	0.35 seconds
Releasing time	0.20 seconds
Weight	1620g (3.57 lb)
Power supply	20.4V – 28.8V
Current consumption	50mA – 1500mA
Operating temperature	32° – 131°F

OnRobot VG10 Filter Kit (see website for details)

Quick#	Part#	Price
8243	OR-100064	\$286.67



OnRobot VGP20 Electric Vacuum Gripper with Quad Zone



Quick# 8213
OR-107242
PRICE: \$6,625.00

OnRobot pricing effective 3/1/2024 and subject to change.

Try It Risk Free!

*Contact us for details

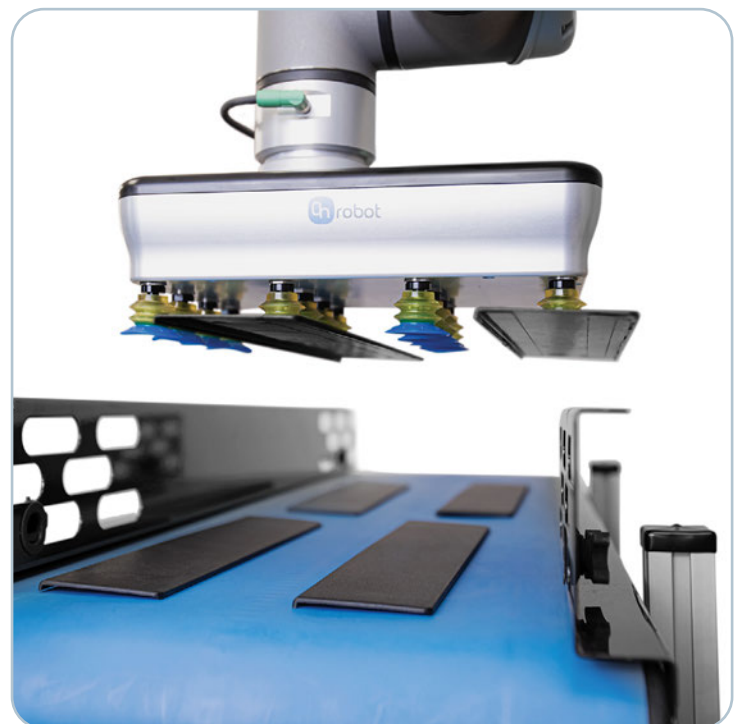
Features:

- Industry's most powerful electric vacuum gripper.
- Highly versatile gripper with unlimited customization possibilities fits many applications.
- Built-in intelligence and multichannel functionality ensure fail-safe, flexible operation.
- Complete out-of-the-box vacuum gripper offers fast, easy deployment with any leading robot.
- Powerful, flexible gripper is ideal for porous and non-porous surfaces.
- Dimensions (with cups): 250mm x 170mm, 92mm tall.
- Sixteen Ø40mm vacuum cups are included with a total 450mm footprint. Many other cup options are available, see pages 322–323.

Technical Specs	
Vacuum	5%–60% Vacuum (1.5Hg – 17.95Hg)
Air flow total	48 L /min (1.7 CFM)
Air flow on each channel	12 L /min (0.42 CFM)
Maximum rated payload*	44 lb (20 kg)
Gripping time**	0.25 seconds
Releasing time	0.40 seconds
Weight	2550g (5.62 lb)
Power supply	20.4V – 28.8V
Current consumption	50mA – 4500mA
Operating temperature	32° – 122°F

* Cardboard is recommended up to 10 kg. 20 kg payload can be achieved with low accelerations (0.2G added to 1G; 1G = gravity = 9.82 m/s²). Other conditions may apply.

** The gripping time can be shortened with smaller or less suction cups. The release time depends on the payload. With high payload, you can achieve fast release time.



Schmalz® CobotPump Electric Vacuum Generator



Try It Risk Free!

*Contact us for details

The CobotPump ECBPM is designed especially for the automated handling of small parts with a single vacuum cup. This lightweight and compact solution is typically used on collaborative robots with a lifting capacity of up to three kilograms (6.6 lbs).

Quick# 8090

ECBPM-UR

PRICE: \$1,598.47



Electric Vacuum Generator for Universal Robots

- Fully electric, no need for compressed air.
- Energy saving control mode ensures efficient operation.
- Mechanical connection via flange adapter plate.
- Central electrical interface and simple control.
- Electrical connection via external cable routing or internal pin connection.
- Compatible with other robots. Contact EMI for more info.
- Has a female G1/4" thread. Reducer bushings on page 1069.
- Many replacement vacuum cups available, see pages 322–323.
- For more information including dimensional drawing, see online product page.

ECBPM Technical Specifications:

- Max payload: 6.6 lb (3 kg)
- Suction rate (max): 1.6 l/min
- Rated power: 7.2 W
- Voltage: 24Vdc
- Rated current: 0.3 A
- Electrical connection: Spring contact
- Noise level (max): 57 dB
- Ambient temperature: 32–104°F (0–40 °C)

ECBPM Vacuum Gripper Kit Includes:

- Cobot Pump with mounting interface.
- Vacuum cups with fittings: Ø20mm Flat & Ø30mm 1.5 Bellow.
- Hardware
- USB Drive with URCap.

Note: Overtightening screws can cause stress cracks, which causes a complete loss of vacuum seal. Refer to our instructions online.



Quick# 8070 & Quick# 8090 Schmalz CobotPump Electric vacuum generator

Wide selection of vacuum cups for Cobot EOAT

The **widest selection** of vacuum cups available! See pages 322–323.

Dual-Durometer



Dual Durometer cups are considered to be the best polyurethane cups for use with EOAT. Mark-free, long-lasting Polyurethane. Flexible surface. 1.5 Bellow, & 2.5 Bellow Ø11–75mm.

Gimatic®



Available in two styles: flat or with 1.5 bellows. Four materials: Silicone, EPDM, HNBR, and Natural Rubber cups. Diameter from Ø11mm to 53mm.

Hithane®



A hybrid, high-temp, non-silicone, non-marking cup for use with hot plastic parts. Maximum temperature 320°F. Good flexibility. Flat, Oval, 1.5 Bellow, & 2.5 Bellow.

Framing



Inline vacuum cup mounts and adjustable angle arms shown to the left are common in vacuum applications.

EMI offers a wide choice of round and hybrid framing profiles, connectors, insert clamps, reducing inserts, slotted brackets, and more for robotic end effectors and EOAT.

See page 186.

Mini



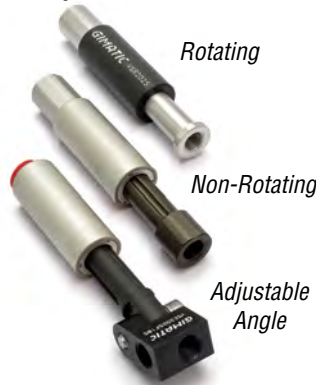
For those tiny parts, vacuum cups as small as Ø1mm. Flat, 1.5 bellows, and 2.5 bellows.

Foam



Very soft, closed-cell silicone foam vacuum cups for textured surfaces. Flat Ø8–40mm. 1.5 bellows, Ø20–40mm.

Suspensions



Suspensions are used to keep vacuum cups in position as the robot approaches. They are typically mounted using the MFI brackets found in our framing section.

EMI has a wide variety of rotating non-rotating, clampable and threaded body suspensions in-stock.

See page 279.

Packaging & Paper



DURAFLEX® mark-free material features the elasticity of rubber in combination with the wear resistance of polyurethane. High-flow fitting allows for high initial vacuum flow needed for bag handling. Ø30–40mm.

Paper & Foil



Ridges keep paper, foil, and other thin material from being sucked into the cup. Natural rubber vacuum cups Ø15–40mm.

Anti-Static



Anti-Static vacuum cups are typically used in electronic, packaging, and small parts applications. These are from the SMC family of vacuum cups. Available in Flat, and 1.5 bellows up to Ø16mm.

For Carbon Fiber



PTFE vacuum cups do not stick to hot carbon fiber parts (up to 480°F) Used in applications where needle grippers would puncture and damage the structure of composites. Supporting ribs avoid suction and deformation of soft materials.

Hi-Speed



Optimized for high speed attachment and release. Great for high speed thin wall molding applications. Silicone and very flexible polyurethane materials.

Tubing & Fittings



EMI has a wide selection of tubing, fittings, adaptors, reducers, manifolds, and accessories—specifically sizes and styles that are used for robots and EOAT applications. See page 1043.

Valves & Regulators

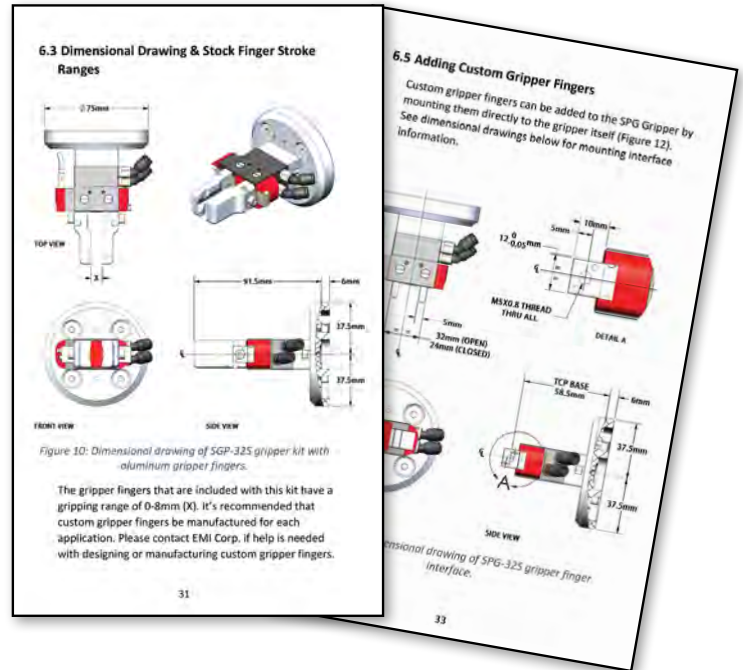


EMI's expert selection of valves and regulators have been engineered to be compact and light in order to be utilized on EOAT. See page 1013

EMI Gripper Kits

All EMI kits include a User Manual and the EMI URcap.

Information including diagrams, dimensions, installation instructions, a BOM, and other technical specifications are found in the User Manuals supplied with each kit.



Our Gripper and Vacuum kits include everything you need!

A USB Flash Drive includes our robot plugin, EMI Catalogs, and manuals. Our gripper kits were designed for ISO-9409-1-50-4-M6 mount pattern but EMI can supply a kit complete with interface plates, and quick changers for your Sawyer, Kuka, Fanuc, or other robots.



Easy installation and programming!



Packaging of EMI Gripper Kits (Q#8001 shown above)

Online product pages have all the information you need!

8204 OnRobot 2FG7 Parallel Gripper for Cobots

Item #: OR 106379
\$3,765.00 Each
 Quantity:
 Add To Cart

Available: In Stock
 CAD File Download
 Datasheet
 360 Degree View
 Application Video

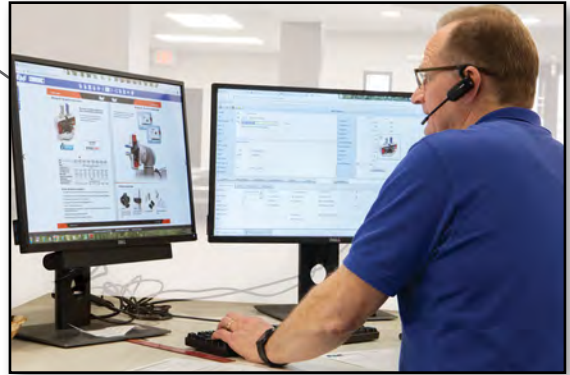
Technical data	Min	Typical	Max
Payload force lift	-	-	7kg / 15.5lbs
Payload form lift	-	-	11kg / 24.3lbs
Total stroke (adjustable)	-	38mm / 1.49in	-
OD Grip Range with stock fingers	1mm	-	73mm
ID Grip Range with stock fingers	11mm	-	83mm
Repetition accuracy	-	0.1mm / 0.004in	-
Gripping force*	20N	-	140N
Gripping force tolerance	-	-	+/-5% ft
Gripping speed**	16mm/second	-	450mm/second
Gripping time (including brake activation)***	-	200ms	-
Storage temperature	0°C / 32°F	-	60°C / 140°F

Operating Conditions	Min	Typical	Max
Power supply	20V	24V	25V
Current consumption	-	-	2000mA*
Operating temperature	5°C / 41°F	-	50°C / 122°F
Calculated MTBF (operating life)	30,000 hours	-	-

Related Items

- 8297 OnRobot 2-Finger Parallel Gripper 2FG7 S-Bellow Kit Set of 2 Bellow
- 8295 OnRobot 2-Finger Parallel Gripper 2FG7 Spare Finger Kit Includes Hardware
- 8296 OnRobot 2-Finger Parallel Gripper Spare Finger Sleeve Kit Set of 4 Sleeves
- 8222 OnRobot Dual Quick Changer for Cobots

Questions? Try Our Live Chat!



Application Examples



Related Items / Replacement Parts

8295 OnRobot 2-Finger Parallel Gripper 2FG7 Spare Finger Kit Includes Hardware

Item #: OR 106553
\$172.00 Each
 Quantity:
 Add To Cart

Available: In Stock

Related Items

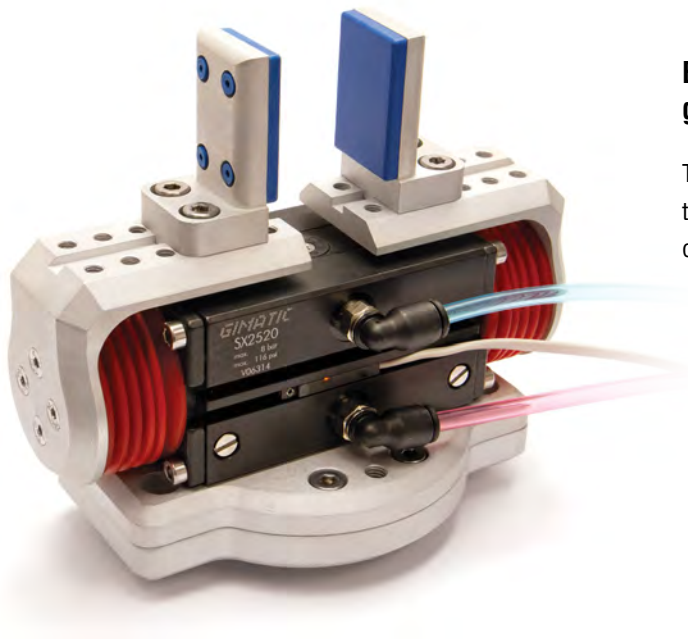
- 8204 OnRobot 2FG7 Parallel Gripper for Cobots
- 8296 OnRobot 2-Finger Parallel Gripper Spare Finger Sleeve Kit Set of 4 Sleeves

Easy online ordering!

- Track Orders
- Create Supply Lists
- Order from History
- Export Purchase Orders



EMI Gripper Kit – Two-Jaw SX for Industrial Cobots



EMI has adapted a cost-effective and industry-proven gripper to expand the capabilities of Industrial cobots.

The Pneumatic SX Gripper Kit for Industrial Cobots by EMI offers the ideal solution for part handling, machine tending and secondary operations in Collaborative Industrial Robot applications.

Quick# 8002
CRK-SX2520-A
KIT PRICE: \$995.00



**Industry Proven
Gripper!**



Part#	SX2510	SX2520	SX4020	SX4040	SX5030	SX5060	SX6340	SX6380
Quick#	7164	7165	7166	7167	7168	7169	7170	7171
Medium	Filtered, lubricated / non-lubricated compressed air							
Operating pressure range	30–116 psi							
Total Opening force at 87 psi	112lbf	112lbf	292lbf	292lbf	472lbf	472lbf	764lbf	764lbf
Total Closing force at 87 psi	87lbf	87lbf	225lbf	225lbf	360lbf	360lbf	562lbf	562lbf
Stroke (±0.5mm)	10mm	20mm	20mm	40mm	30mm	60mm	40mm	80mm
Opening / closing time without load	0.03s	0.05s	0.03s	0.08s	0.06s	0.10s	0.20s	0.30s
Repetition accuracy	0.05mm							
Mid-stroke detection capability	No	Yes, with Magnetoresistive sensor						
Weight of Gripper (Only)	260g	310g	750g	900g	1300g	1700g	2800g	3500g

SX Parallel, Self-Centering Two-Jaw Gripper Kit:

- This versatile kit can be adapted to other SX Gripper sizes with various strokes and gripping forces upon request.
- The precision machined components make this industrial gripper rugged, while offering a high degree of repeatability.
- The SX gripper is completely sealed – IP67 protection class.
- Double acting with 5/2 solenoid valve and cable management clamps.
- Includes 1 magnet sensor for part detection. Contact EMI to upgrade to teachable PRO-SS sensors.
- The included interface plate mounts directly to any robot with an ISO-9409-1-50-4-M6 tool flange. Contact EMI if you need a different interface plate.
- Includes 3 sets of finger pads: Silicone, Rubber, HNBR.
- CRK-SX2520-A Mass: 735g (subject to change per configuration).
- Dimensional drawings found online. For more information, see SX gripper page 720.

EMI Gripper Kit – Two-Jaw SX for Industrial Cobots

Easy installation and programming!



CRK-SX2520-A Gripper Kit Includes:



Quick# 8016
5/2 Solenoid valve with fittings, muffers, and non-slip Velcro® strap.



Quick# 8015
Two cable management clamps with non-slip Velcro strap.

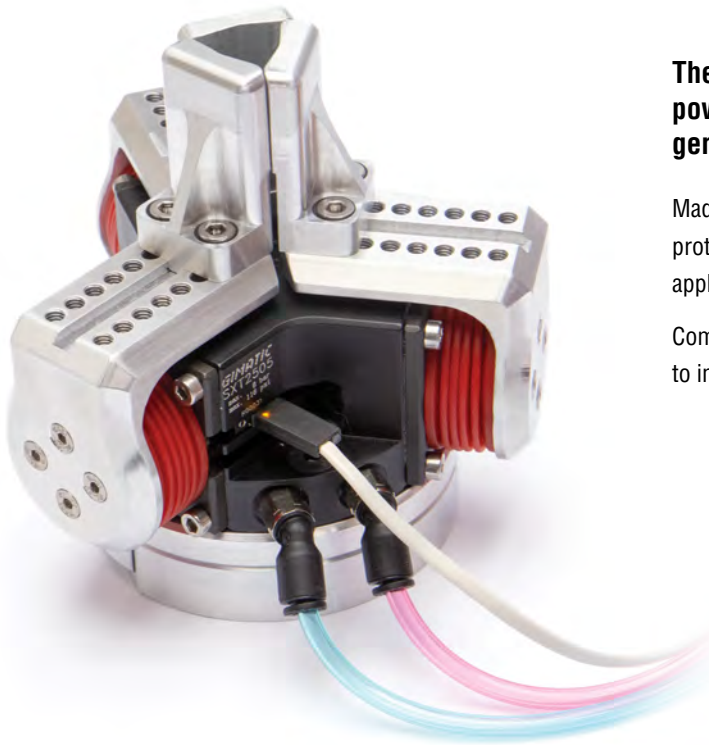


Alternate pads for fingers.



USB drive with URCap, and user manual.

EMI Gripper Kit – Three-Jaw SXT for Industrial Cobots



The SXT gripper kit by EMI uses a concentric, powerful 3-jaw gripper ideal for machine tending and general handling of cylindrical workpieces.

Made out of high-quality machined components with an IP67 protection class, the SXT Gripper is ideal for a variety of industrial applications.

Compatible with any robot and with all the features to make it easy to install and kick off on your next Cobot Application.

Quick# 8006
CRK-SXT2505-A
KIT PRICE: \$1,495.00



Part#	SXT2505	SXT4008	SXT5012	SXT6315
Quick#	7172	7173	7174	7175
Medium	Filtered, lubricated / non-lubricated compressed air			
Operating pressure range	36–116 psi			
Total Opening force at 87 psi	168lbf	438lbf	708lbf	1112lbf
Total Closing force at 87 psi	131lbf	337lbf	539lbf	809lbf
Stroke (±0.5mm)	3x5mm	3x8mm	3x12mm	3x15mm
Opening / closing time without load	0.02s	0.02s	0.05s	0.15s
Repetition accuracy	0.05mm			
Mid-stroke detection capability	No	Yes, with Magnetoresistive sensor		
Weight of Gripper (only)	420g	1100g	2000g	3800g

SXT Concentric, Self-Centering Three-Jaw Gripper Kit:

- This versatile kit can be adapted to other SXT Gripper sizes with various strokes and gripping forces upon request
- Gripping Range: Ø12mm - Ø76mm
- Completely sealed with IP67 protection class.
- Double acting with 5/2 solenoid valve and cable management clamps.
- Includes 1 magnetic sensor for open/close position detection. Contact EMI to upgrade to teachable PRO-SN sensors.
- The included interface plate mounts directly to any robot with an ISO-9409-1-50-4-M6 tool flange. Contact EMI if you need a different interface plate.
- Includes an alternative set of V-Groove fingers to extend the gripping range.
- CRK-SXT2505-A Mass: 825g (subject to change per configuration).
- Dimensional drawings found online. For more information, see SXT gripper page 722.

EMI Gripper Kit – Three-Jaw SXT for Industrial Cobots

Powerful Grip!



Includes USB drive with literature and robot software plug-in.

CRK-SXT2505-A Gripper Kit Includes:



Quick# 8016

5/2 Solenoid valve with fittings, muffers, and non-slip Velcro® strap.



Quick# 8015

Two cable management clamps with non-slip Velcro strap.



Alternate V-Groove fingers to extend the gripping range. Contact EMI for custom fingers.



USB drive with URcap, and user manual.

EMI Gripper Kit – Two-Jaw SGP for Industrial Cobots



EMI's experience in high precision applications prove that the SGP family of grippers are the perfect solution for a wide variety of industrial gripper needs.

The SGP High Precision Gripper Kit for Industrial Cobots by EMI is a double-acting parallel gripper ideal for high precision applications such as insert loading or high accuracy pick-and-place. With blank finger-mounting jaws, the possibilities are virtually endless with the ability to use custom fingers that fit your exact application.

Quick# 8001
CRK-SGP32S-A
KIT PRICE: \$695.00



Part#	SGP-20S	SGP-25S	SGP-32S	SGP-40S
Quick#	6780	6781	6782	6783
Medium	Filtered, lubricated / non-lubricated compressed air			
Pressure range	30–116 psi			
Opening total gripping force at 87 psi	10lbf	23lbf	30lbf	36lbf
Closing total gripping force at 87 psi	9lbf	21lbf	27lbf	33lbf
Total stroke (± 0.3mm)	4mm	6mm	8mm	12mm
Maximum repeatability tolerance	±0.02mm			
Mid-stroke detection capability	Yes, with use of Inductive sensor			
Weight of gripper (only)	33g	43g	86g	170g



EMI can help develop 3D printed or machined fingers.

SGP Parallel, High-Precision Gripper Kit :

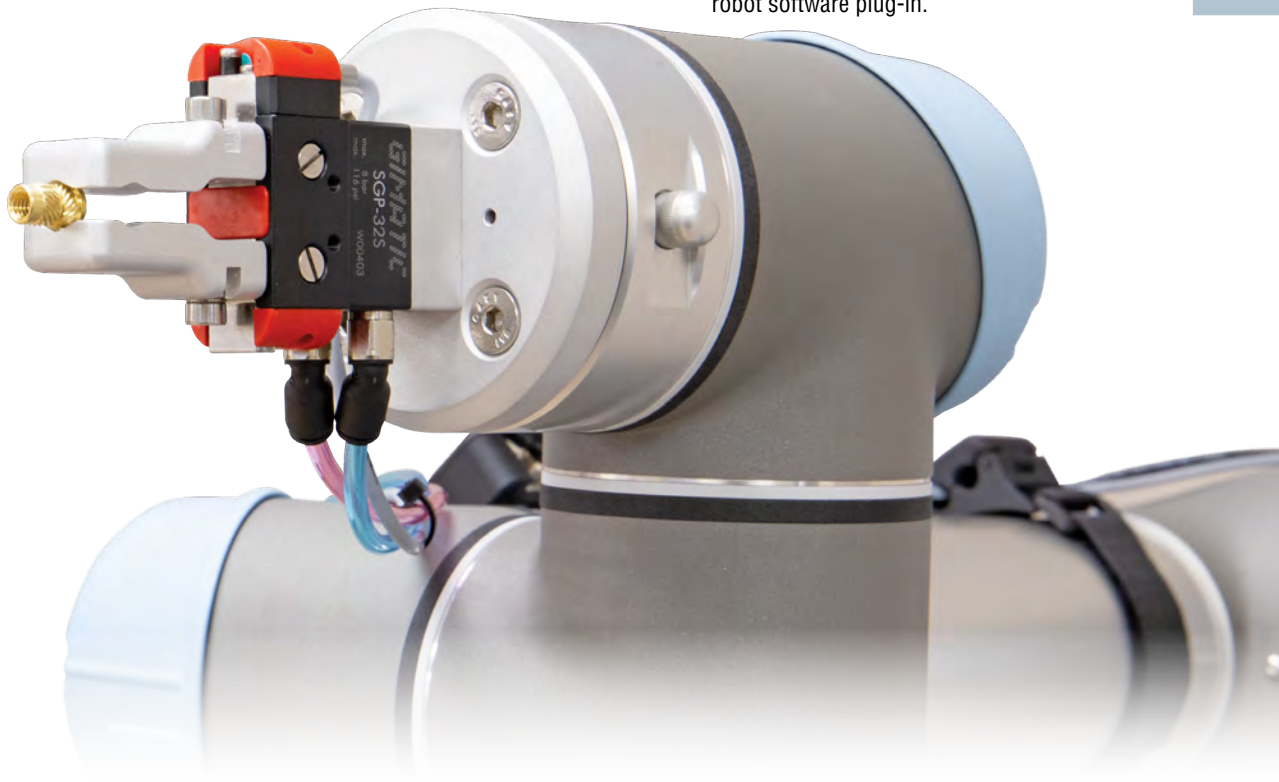
- This versatile kit can be adapted to other SGP Gripper sizes with various strokes and gripping forces upon request.
- Double acting with patented backlash adjusting system.
- The rugged construction lends itself to heavy-duty applications for a trouble-free long life without maintenance.
- Includes 5/2 solenoid valve and cable management clamps.
- Includes 1 inductive sensor for mid-stroke workpiece detection. Contact EMI for 3-Position Teachable PRO sensors.
- The included interface plate mounts directly to any robot with an ISO-9409-1-50-4-M6 tool flange. Contact EMI if you need a different interface plate.
- 0–8mm V-Groove fingers included.
- CRK-SGP32S-A Mass: 285g (subject to change per configuration).
- Dimensional drawings found online. For more information, see SGP gripper page 654.

EMI Gripper Kit – Two-Jaw SGP for Industrial Cobots

**Cost Effective,
High Precision!**



Includes USB drive with literature and robot software plug-in.



CRK-SGP32S-A Gripper Kit Includes:



Quick# 8016

5/2 Solenoid valve with fittings, mufflers, and non-slip Velcro® strap.



Quick# 8015

Two cable management clamps with non-slip Velcro strap.



Interface plates, magnetic sensor for part detection, USB drive with URCap, and user manual.



High-precision Inductive sensor for part detection.

Gimatic Electric Gripper Kit for Cobots – KIT-UR-G

The Gimatic KIT-UR-G is an industrial electric gripper that plugs straight to your Universal Robot's wrist connector. Equipped with machined fingers that can be replaced by custom fingers for your application.

Try It Risk Free!

*Contact us for details

Quick# 8010
KIT-UR-G

PRICE: \$2,028.00



Plug & Play
Solution!

Features:

- Compatible with UR3(e), UR5(e), UR10(e).
- Connects directly to the robot's wrist.
- 2x3mm Stroke with 15 lbf total gripping force.
- Base Diameter: 100mm
- Total Height (fingers included): 83mm
- Contact EMI for custom fingers.
- Sensor ready for gripping or end of the stroke detection.
- The included interface plate mounts directly to any robot with an ISO-9409-1-50-4-M6 tool flange. Contact EMI if you need a different interface plate.
- Gimatic URCap available.
- See page 600 for gripper specifications.



Available in Various Strokes & Grip Force!
Cost Effective Electric Grippers starting on page 600.

Gimatic Electric Gripper Kit for Cobots – KIT-UR-J

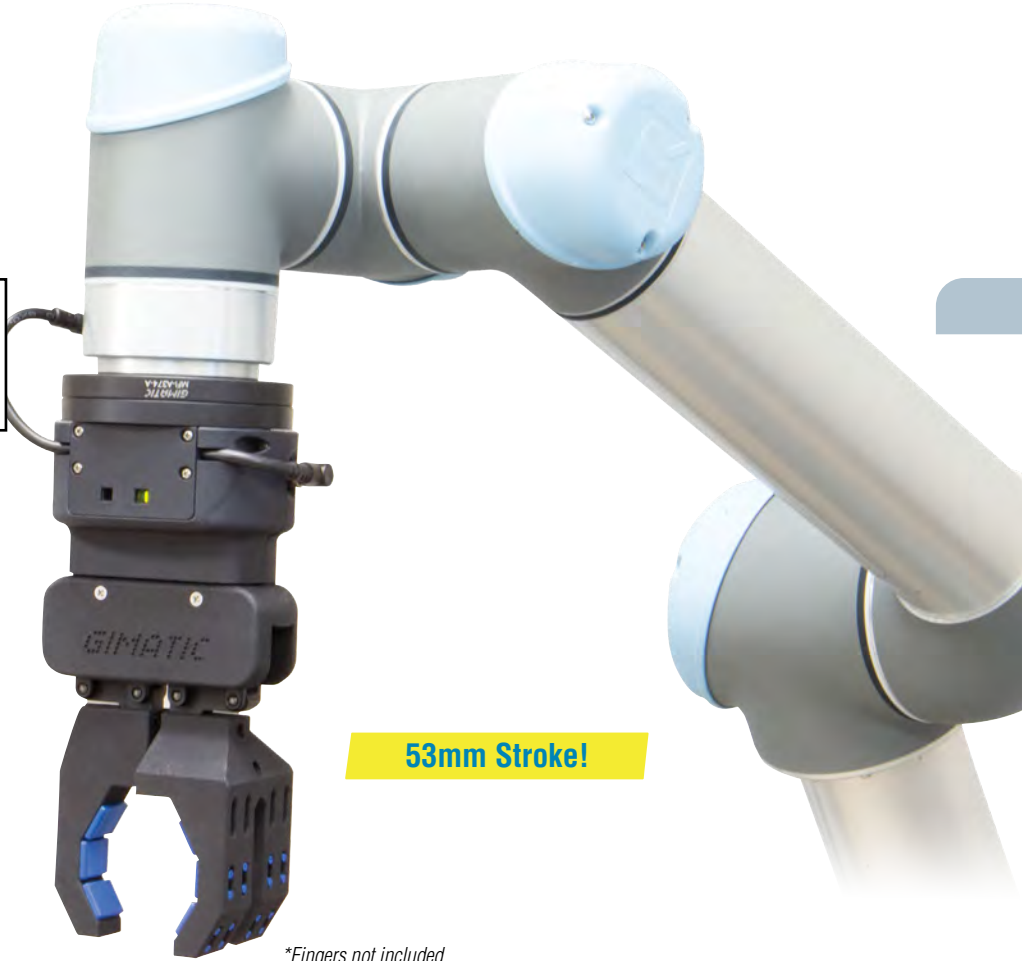
The Gimatic KIT-UR-J is an industrial electric gripper with a long stroke that plugs straight to your Universal Robot’s wrist connector. Equipped with finger blanks that can be fitted with custom fingers (shown below) specific to your application.

Try It Risk Free!

*Contact us for details

Quick# 8012
KIT-UR-J

PRICE: \$2,904.00



53mm Stroke!

*Fingers not included.



*Shown here without fingers..

Features:

- Compatible with UR3(e), UR5(e), UR10(e); Gimatic URcap available.
- **Also available for Techman Robots, see Quick# 8031.**
- Plug & play solution.
- Connects directly to the robot’s wrist.
- Sensor ready for gripping or end of the stroke detection.
- 53mm Stroke
- Base Diameter: 100mm
- The included interface plate mounts directly to any robot with an ISO-9409-1-50-4-M6 tool flange. Contact EMI if you need a different interface plate.
- See page 610 for gripper specifications.



Custom fingers available, contact us today!

OnRobot 2FG7 Parallel Gripper for Cobots



NEW

OnRobot's 2FG7 is a complete, off-the-shelf electric parallel gripper that can be deployed within minutes and requires no custom engineering for installation, programming, or maintenance.

This strong parallel gripper can be used in tight spaces and handles demanding payload requirements.

Quick# 8204
OR-106376

PRICE: \$4,633.00

OnRobot pricing effective 3/1/2024 and subject to change.

Try It Risk Free!

*Contact us for details



Features:

- Grip detection / lost grip detection.
- Custom fingers available from EMI.
- Integrated software.
- Ready for use almost anywhere, with IP67 rating for harsh environments and ISO Class 5 certification for cleanroom use.
- Dimensional drawing and further technical information can be found on EMI's website.

Technical Specs	
Total OD stroke (w/ stock fingers)	1–73mm
Total ID stroke (w/ stock fingers)	11–83mm
Payload with stock fingers (force fit)	15.43 lb (7kg)
Payload with custom fingers (form fit)	24.25 lb (11kg)
Repetition accuracy	± 0.1mm
Gripping force (adjustable)*	4.5 lbf – 31.5 lbf
Gripping force deviation	+/- 5%
Gripping speed**	16mm – 450mm /second
Gripping time***	200ms
Storage temperature	32° – 140°F
Weight	1100g (2.4 lb)
Power supply	20V – 25V
Max. Current consumption****	2000mA
Operating temperature	41° – 122°F

* The required current is 2000 mA, less current will result in less gripping force.

** Relatively from the gripping object (both arms).

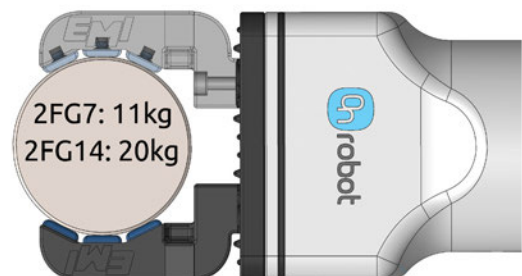
*** At 4 mm stroke and 80 N. The typical value is 300 ms at 40 mm and 80 N.

****Automatically adapts to the current requirements when UR CB3 tool connector is used (600mA).

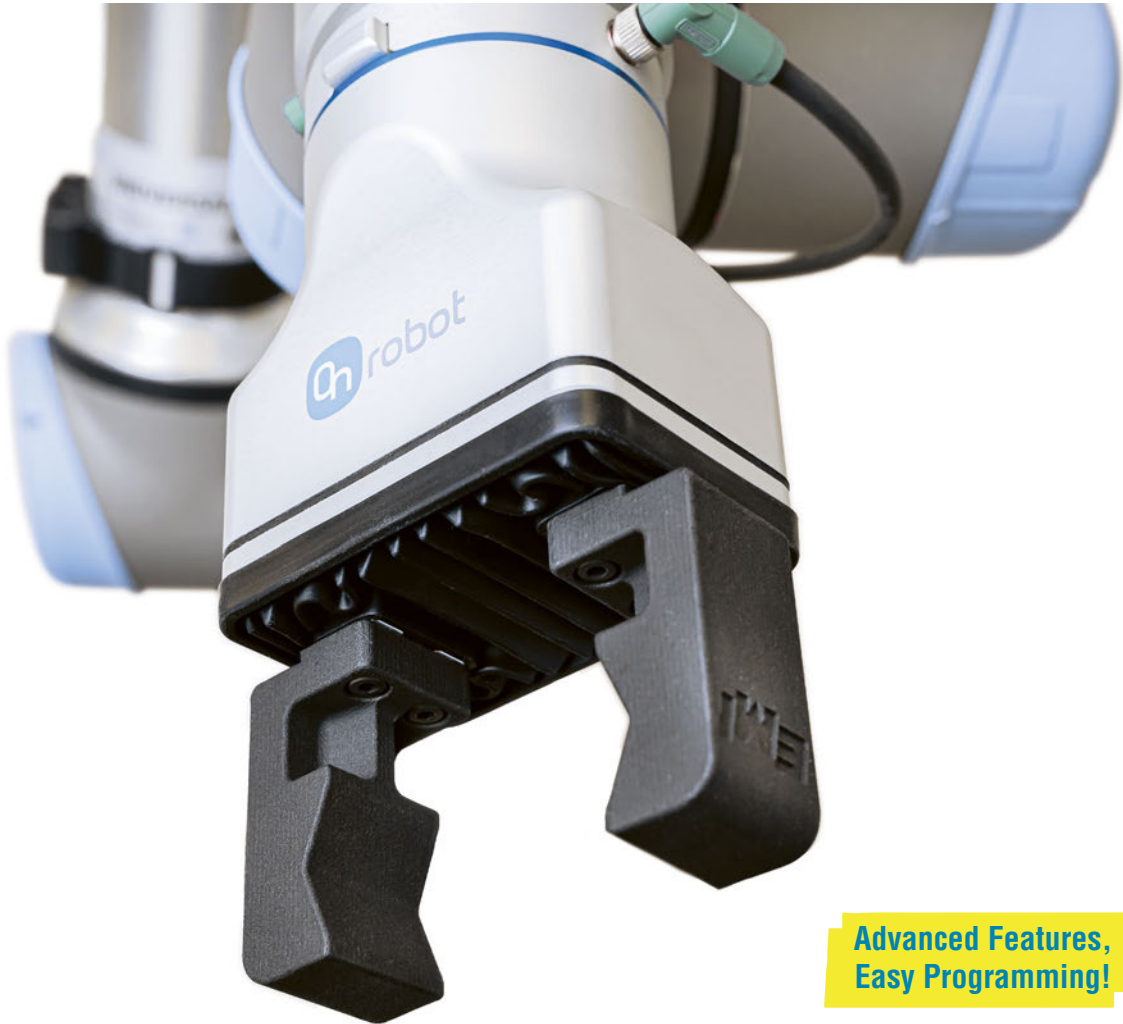
Force Fit:



Form Fit:



OnRobot 2FG7 Parallel Gripper for Cobots



**Advanced Features,
Easy Programming!**

Shown with custom 3D printed fingers. Available from EMI.

2FG7 Replacement Fingers and Bellow



**In-Stock
Replacement Parts!**

Replacement 2FG7 Parts

Quick#	Part#	Description	Price
8295	OR-106553	2-Finger Kit (2pc plus hardware)	\$223.33
8296	OR-106559	Finger Sleeves (4pc)	\$86.67
8297	OR-113012	Bellow Kit (2pc)	\$53.33

OnRobot pricing effective 3/1/2024 and subject to change.

OnRobot RG2 Adaptive Gripper for Cobots



Adaptive Grippers make it easy to program secondary operations using Cobots around the Injection Molding Machine or anywhere in your plant.

Contact our EOAT experts to learn more about OnRobot! Cobots@EMICorp.com

Quick# 8201
OR-102012
PRICE: \$5,472.00

OnRobot pricing effective 3/1/2024 and subject to change.

Try It Risk Free!

*Contact us for details



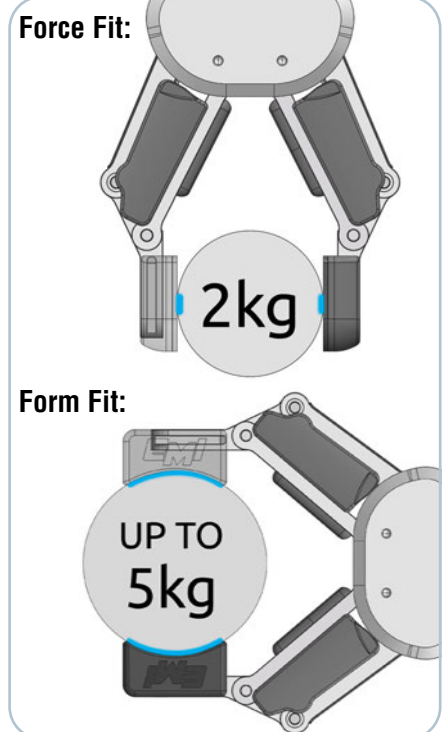
Features:

- Grip indications (part confirmation).
- Custom fingers available from EMI.
- Automatic tool center point (TCP) calculation, depth compensation, and payload calculation for UR.
- Integrated software.
- +/-90° Angular adjustments built into device in 30° Increments.
- Dimensional drawing and further technical information can be found on EMI's website.

Technical Specs	
Adjustable stroke (w/ stock fingers)	0–110mm
Payload with stock fingers (force fit)	4.4 lb (2 kg)
Payload with custom fingers (form fit)	11.02 lb (5 kg)
Finger position resolution	± 0.1mm
Repetition accuracy	± 0.1mm– 0.2mm
Reversing backlash	± 0.1mm – 0.3mm
Gripping force (adjustable)	3 – 40 N (0.7 – 9 lbf)
Gripping force deviation	+/-25%
Gripping speed	38mm – 127mm /second
Gripping time*	0.06s – 0.21s
Adjustable bracket tilting accuracy	less than 1°
Storage temperature	32° – 122°F
Weight	780g (1.72 lb)
Power supply	20V – 25V
Current consumption**	10mA –600mA
Operating temperature	41° – 122°F

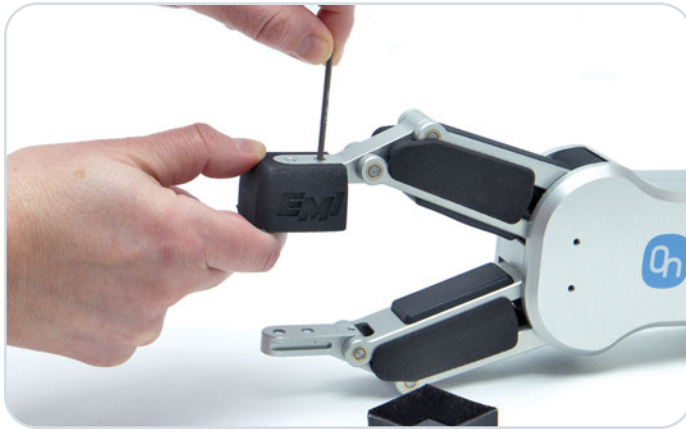
* Based on 8mm total movement between fingers. The speed is linearly proportional to the force.

**Current spikes up to 3A (max 6mS) may occur during the release action.

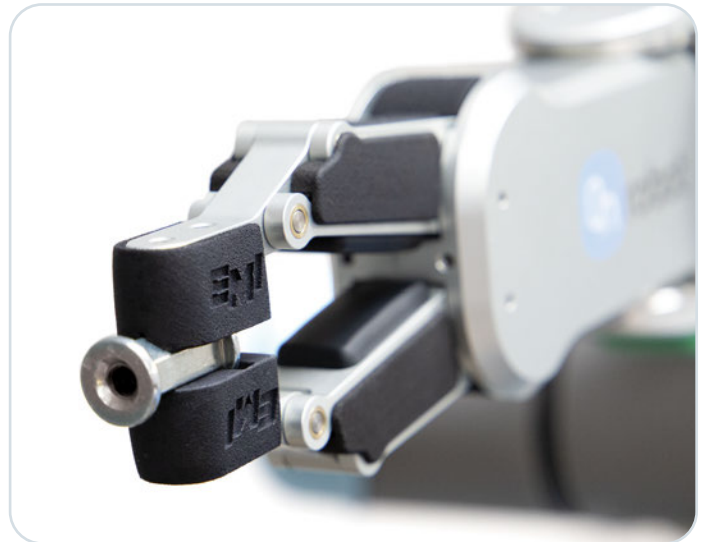


OnRobot RG2 Adaptive Gripper for Cobots

Easy finger tip replacement



Perfect for insert-loading applications



OnRobot's RG2 gripper has a dovetail style finger tip design which enables you to use custom fingers made for your application(s).

RG2 Replacement Items



Quick#	Part#	Description	Price
8240	OR-100669	Standard Finger Tip	\$86.67
8272	OR-105871	X-Shape Finger Tip	\$131.67
8274	OR-106959	50mm Finger Extension	\$233.33
8275	OR-106960	100mm Finger Extension	\$233.33

Note: See EMI website for dimensional drawings.
 OnRobot pricing effective 3/1/2024 and subject to change.

Contact EMI for Custom Fingers: Cobots@EMInc.com

OnRobot RG6 Adaptive Gripper for Cobots



OnRobot's RG6 adaptive gripper is a powerful adaptive gripper with features that make it the ideal gripper for Collaborative and Industrial Applications. It includes a built-in Quick Changer, adjustable stroke and grip force, finger tips, and software that makes it easy to use.

Quick# 8202
OR-102021
PRICE: \$6,554.00

OnRobot pricing effective 3/1/2024 and subject to change.

Try It Risk Free!

*Contact us for details



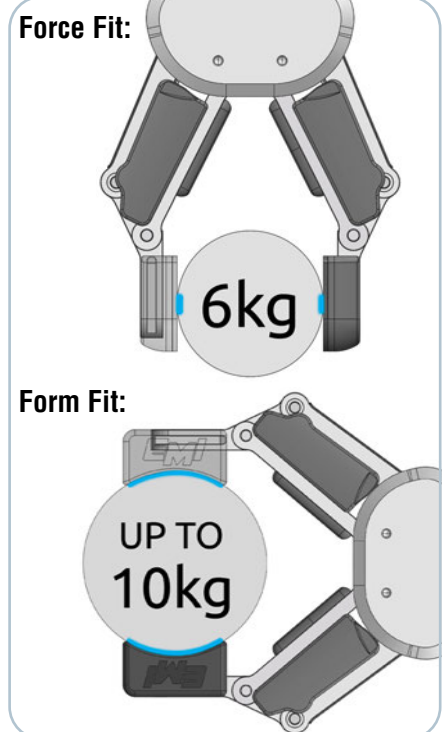
Features:

- Grip indications (part confirmation).
- Custom fingers available from EMI.
- Automatic tool center point (TCP) calculation, depth compensation, and payload calculation for UR.
- Integrated software.
- +/-90° Angular adjustments built into device in 30° Increments.
- Dimensional drawing and further technical information can be found on EMI's website.

Technical Specs	
Adjustable stroke (w/ stock fingers)	0–160mm
Payload with stock fingers (force fit)	13.22 lb (6 kg)
Payload with custom fingers (form fit)	22.04 lb (10 kg)
Finger position resolution	± 0.1mm
Repetition accuracy	± 0.1mm – 0.2mm
Reversing backlash	± 0.1mm – 0.3mm
Gripping force (adjustable)	25 – 120 N (5.6 – 27 lbf)
Gripping force deviation	+/-25%
Gripping speed	51mm – 160mm /second
Gripping time*	0.05s – 0.15s
Adjustable bracket tilting accuracy	less than 1°
Storage temperature	32° – 122°F
Weight	1250g (1.76 lb)
Power supply	20V – 25V
Current consumption**	70mA – 600mA
Operating temperature	41° – 122°F

* Based on 8mm total movement between fingers. The speed is linearly proportional to the force.

**Current spikes up to 3A (max 6mS) may occur during the release action.

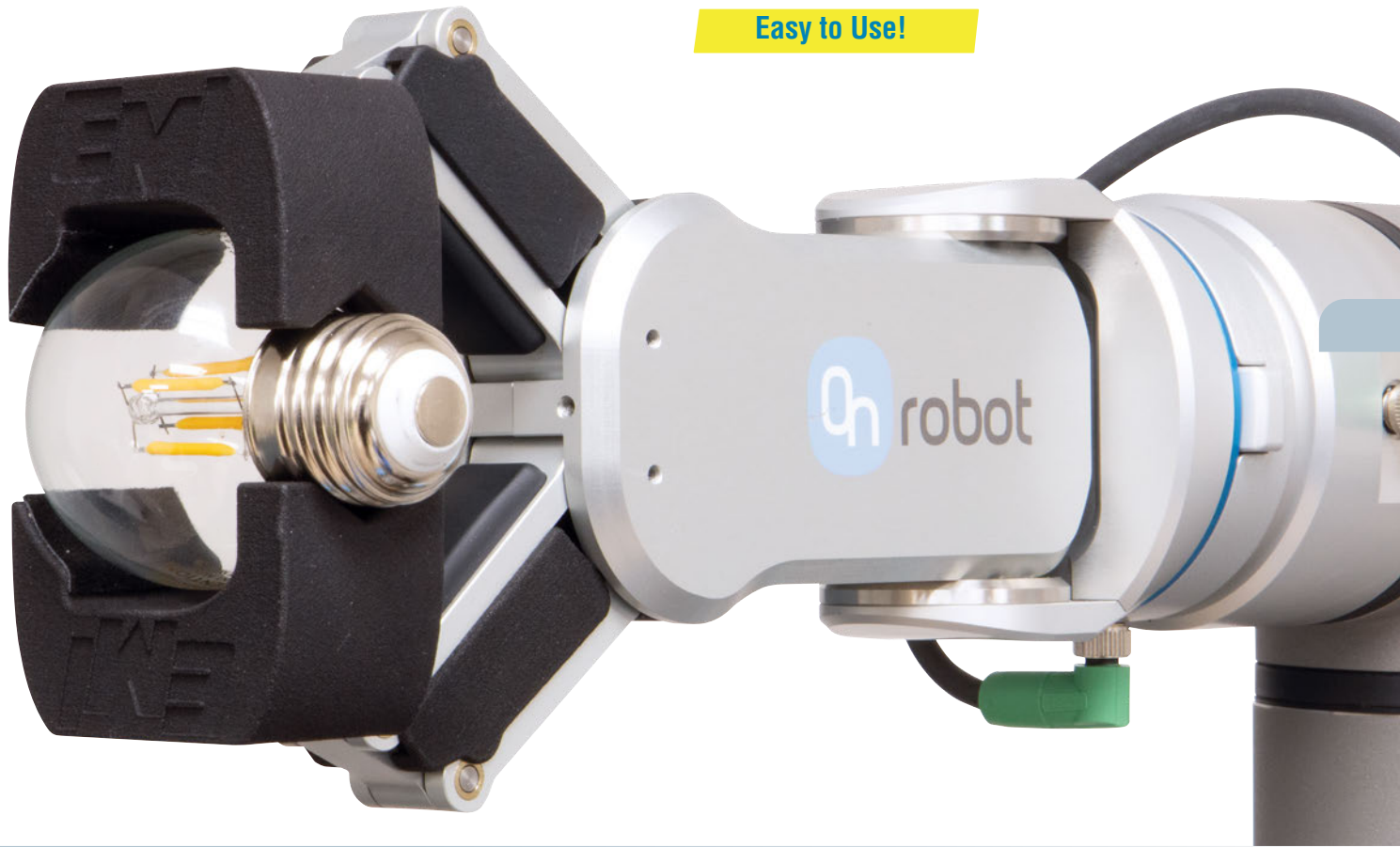


OnRobot RG6 Adaptive Gripper for Cobots

Custom fingers with soft-touch flocking available.

Contact EMI about 3D printed fingers.

Easy to Use!



Replacement and Optional RG6 Items



#8241



#8273



#8276

Quick#	Part#	Description	Price
8241	OR-100670	Standard Finger Tip	\$86.67
8273	OR-106957	X-Shape Finger Tip	\$131.67
8276	OR-106966	50mm Finger Extension	\$233.33
8277	OR-106967	100mm Finger Extension	\$233.33

Note: See EMI website for dimensional drawings.

OnRobot pricing effective 3/1/2024 and subject to change.

OnRobot 3FG15 Three-Jaw Gripper for Cobots



NEW

The 3FG15 is ideal for gripping a wide range of cylindrical objects in machine-tending applications such as CNC lathe machines. The gripper's design automatically centers workpieces, resulting in fast deployment with a strong, stable grip and precise placement.

Quick# 8203
OR-103666

PRICE: \$5,768.00

OnRobot pricing effective 3/1/2024 and subject to change.

Try It Risk Free!

*Contact us for details



Features:

- Grip indications (part confirmation).
- Custom fingers available from EMI.
- Automatic tool center point (TCP) calculation, depth compensation, and payload calculation for UR.
- Integrated software.
- Ready for use almost anywhere, with IP67 rating for harsh environments and ISO Class 5 certification for cleanroom use.
- Dimensional drawing and further technical information can be found on EMI's website.

Technical Specs	
Total OD stroke (w/ stock fingers)	4–152mm
Total ID stroke (w/ stock fingers)	35–176mm
Payload with stock fingers (force fit)	22.04 lb (10 kg)
Payload with custom fingers (form fit)	33.06 lb (15 kg)
Finger position resolution	±0.1mm
Repetition accuracy	± 0.1mm–0.2mm
Gripping force (adjustable)*	10 – 240 N (2.25 lbf – 54 lbf)
Gripping force deviation	+/- 5%
Gripping speed**	125mm
Gripping time***	500ms
Storage temperature	32° – 140°F
Weight	1500g (2.5 lb)
Power supply	20V – 25V
Max. Current consumption****	1500mA
Operating temperature	41° – 122°F

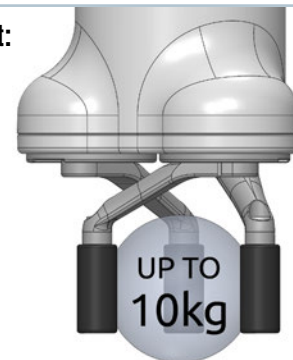
* The required current is 2000 mA, less current will result in less gripping force.

** Relatively from the gripping object (both arms).

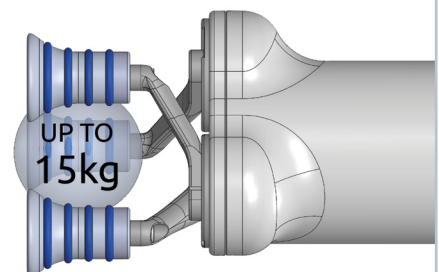
*** At 4 mm stroke and 80 N. The typical value is 300 ms at 40 mm and 80 N.

****Automatically adapts to the current requirements when UR CB3 tool connector is used (600mA).

Force Fit:

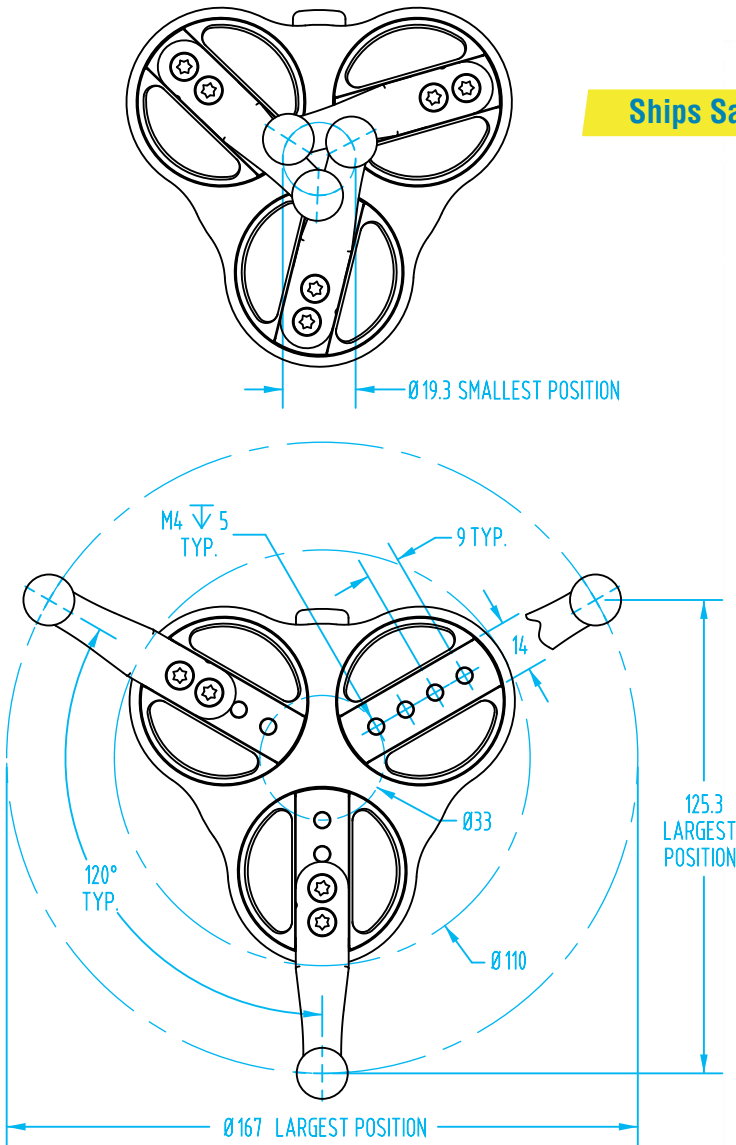


Form Fit:



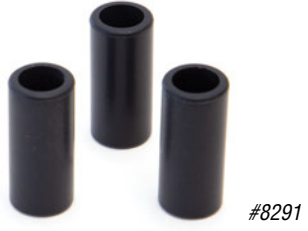
OnRobot 3FG15 Three-Jaw Gripper for Cobots

Ships Same Day!



3FG15 Replacement Fingers and Bumpers

In-Stock Replacement Parts!



Replacement 3FG15 Parts

Quick#	Part#	Description	Price
8290	OR-104160	Ø10mm Steel fingers (3pc)	\$86.67
8291	OR-104162	Rubber bumpers for Ø10mm fingers (3pc)	\$86.67
8292	OR-104241	Ø13mm Steel fingers (3pc)	\$86.67
8293	OR-104240	Rubber bumpers for Ø13mm fingers (3pc)	\$86.67
8278	OR-105877	X-Shape Steel fingers (3pc)	\$233.33
8294	OR-104161	Steel finger base for fingers (3pc)	\$160.00

OnRobot pricing effective 3/1/2024 and subject to change.

Machine Tending Kits from EMI

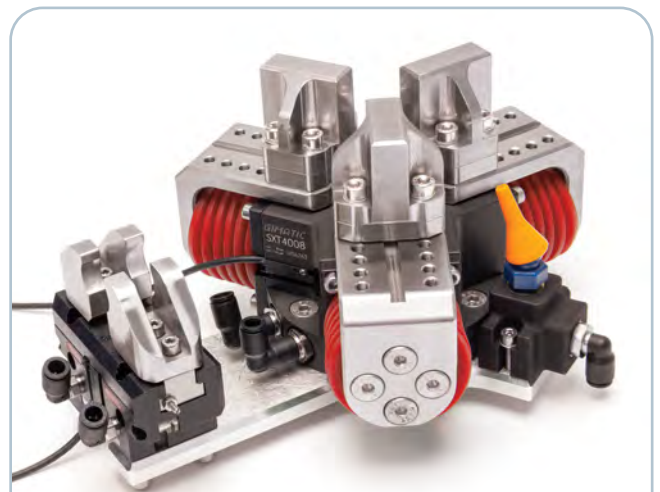
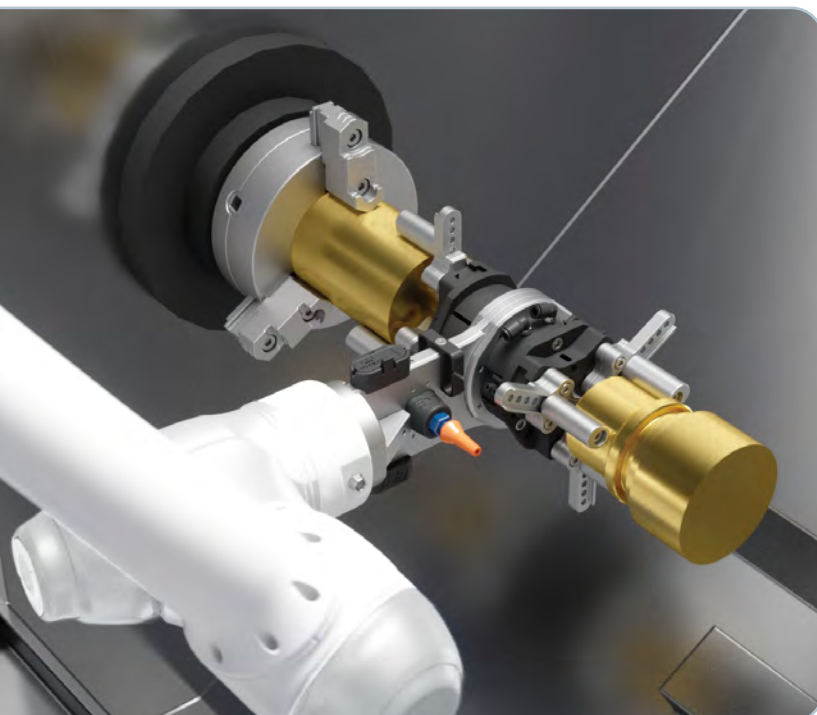
Machine Tending Kits from EMI are a perfect starting point for tending machine centers, such as CNC mills and lathes. With multiple mounting configurations available, these kits can be used in a wide variety of applications.

Features:

- Mounts directly to ISO 9409-1-50-4-M6 robot flange.
- Mounting options include dual gripper set up in a 90° or 180° configuration and single gripper 180°.
- 2-Jaw & 3-Jaw gripper options available in each mounting option.
- Grippers can be mounted in multiple orientations.
- All kits include stock, adjustable gripping jaws.
- Includes EMI's Essentials Tool Kit (Q# 8110).
- Each gripper includes a multi-output, programmable sensor (PNP).
- Includes blow-off manifold, nozzle kit and blocking plate.
- Operates via filtered, lubricated/unlubricated compressed air (nominal pressure, 87 psi).



Automate Your Machine Tending Process!



**Need a custom solution?
EMI can provide that too!**

Our Machine Tending Datasheet is online at: www.EMICorp.com
or contact: Cobots@EMICorp.com today.

Machine Tending Kits from EMI

How to select the best kit:

Step 1: Select a Mounting Configuration



D90: Dual Gripper 90°



D180: Dual Gripper 180°



S180: Single Gripper 180°

Step 2: Select a Two or Three Jaw Gripper



2-Jaw Gripper DH-44__

- DH4410: Shorter Stroke, Higher Grip Force
- DH4420: Longer Stroke, Lower Grip Force



3-Jaw Gripper TH-54__

- TH5404: Shorter Stroke, Higher Grip Force
- TH5408: Longer Stroke, Lower Grip Force

Step 3: Select Pneumatics Control Package (optional)

Control your EMI Machine Tending Kit with our pre-configured and pre-assembled, 3-station pneumatic solenoid valve kit and filter/regulator assembly. Perfect for controlling two grippers and blow-off nozzle.



Filter / Regulator Assembly

Quick#	Part#	Description	Price
2800	CRA-FR-R14-1	Filter / Regulator with Shut-off and R1/4" Ports	\$99.50

Note: See website for more information. Visit www.EMICorp.com and search by Quick#.



3-Station Valve Assembly, PNP

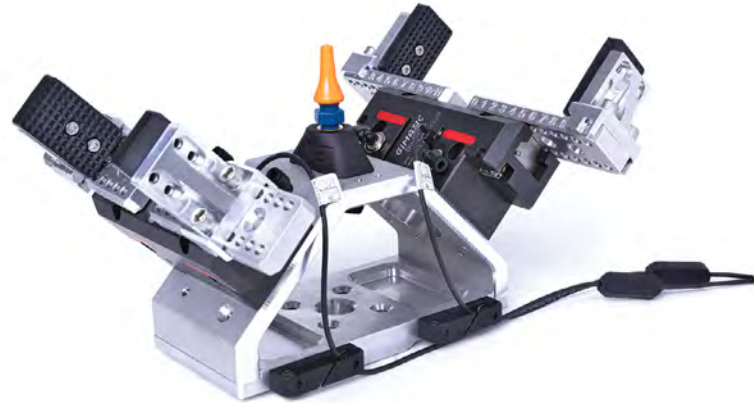
Quick#	Part#	Description	Price
2801	CRA-JSY1-P3Z-1	2x 5/2 Single Solenoid + 1x 5/4 Double Solenoid	\$635.00
2802	CRA-JSY1-P3Z-2	2x 5/2 Double Solenoid + 1x 5/4 Double Solenoid	\$695.00

Other configurations available upon request, contact EMI.

Machine Tending – 2-Jaw Parallel Gripper Kits

2-Jaw Kit Features:

- 2-Jaw kits include Aluminum jaws, and HNBR & Rubber pad options.
- Reversible finger base for increased gripping range.
- Kits can be used to pick either external (closed grip) or interior surfaces (open grip).
- 2-Jaw grippers can be mounted in multiple orientations (rotated 90° increments).
- See page 724 for more information on DH grippers.



Find More Information Online!



Quick#	8111	8112	8113	8114	8115	8116
Part#	CRK-DH4410-D90-A	CRK-DH4420-D90-A	CRK-DH4410-D180-A	CRK-DH4420-D180-A	CRK-DH4410-S180-A	CRK-DH4420-S180-A
Price	\$4,195.00	\$4,195.00	\$3,695.00	\$3,695.00	\$1,945.00	\$1,945.00
Mount configuration						
Operating pressure range	36–116 psi					
Gripper stroke	2x5mm	2x10mm	2x5mm	2x10mm	2x5mm	2x10mm
Gripper type	2x DH4410	2x DH4420	2x DH4410	2x DH4420	1x DH4410	1x DH4420
Closing force w/stock jaws	247.3 lbf	123.6 lbf	247.3 lbf	123.6 lbf	247.3 lbf	123.6 lbf
Kit Operating Grip Range*^	0–160mm	0–170mm	0–160mm	0–170mm	0–160mm	0–170mm
Maximum work piece mass***	6.2 kg	3.0 kg	6.2 kg	3.0 kg	6.2 kg	3.0 kg
Weight	3.31 kg	3.27 kg	3.15 kg	3.11 kg	1.89 kg	1.87 kg

*Minimum to maximum external grip range with the included stock finger kit.

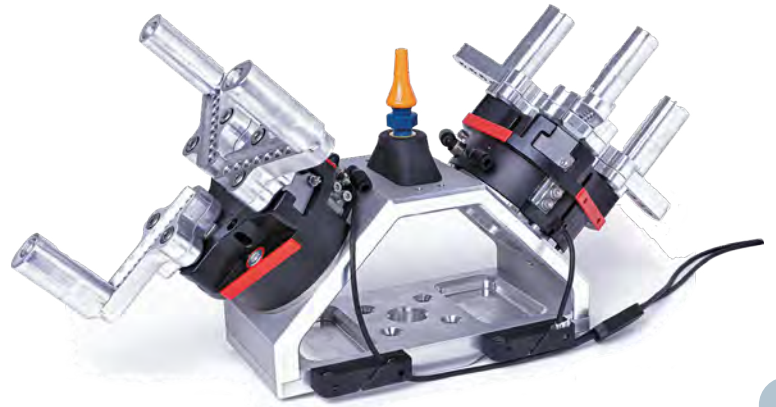
**Indicates usage at 87psi with stock finger kit with dry & clear surface conditions. Varies based on grip style, orientation, materials and input pressure.

^ Values may vary slightly based on certain application conditions. See online product page for more detailed information.

Machine Tending – 3-Jaw Concentric Gripper Kits

3-Jaw Kit Features:

- 3-Jaw kits include dual-sided gripper fingers to accommodate a larger variety of grip ranges.
- D180 gripper mounting configuration includes S180 gripper cap, to be used as a single gripper configuration.
- Kits can be used to pick either the OD (closed grip) or ID (open grip).
- 3-Jaw grippers can be mounted in multiple orientations (D90: 60° increments, D180/S180: 90° increments).
- See page 726 for more information on TH grippers.



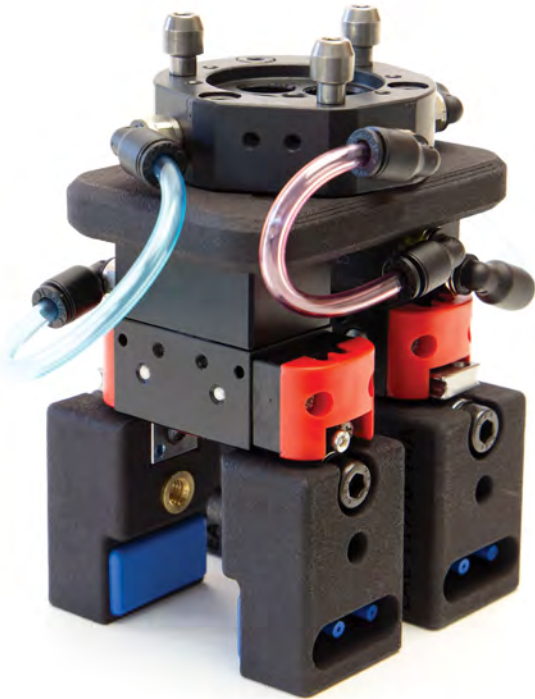
Quick#	8117	8118	8119	8120	8121	8122
Part#	CRK-TH5404-D90-A	CRK-TH5408-D90-A	CRK-TH5404-D180-A	CRK-TH5408-D180-A	CRK-TH5404-S180-A	CRK-TH5408-S180-A
Price	\$4,295.00	\$4,295.00	\$3,795.00	\$3,795.00	\$1,995.00	\$1,995.00
Mount configuration						
Operating pressure range	36–116 psi					
Gripper stroke	3x4mm	3x8mm	3x4mm	3x8mm	3x4mm	3x8mm
Gripper type	2x TH5404	2x TH5408	2x TH5404	2x TH5408	1x TH5404	1x TH5408
Closing force w/stock jaws	370.9 lbf	185.5 lbf	370.9 lbf	185.5 lbf	370.9 lbf	185.5 lbf
Kit Operating Grip Range**^	0–150mm	0–158mm	0–150mm	0–158mm	0–150mm	0–158mm
Maximum work piece mass***^	8.9 kg	4.4 kg	8.9 kg	4.4 kg	8.9 kg	4.4 kg
Weight	3.29 kg	3.27 kg	3.12 kg	3.10 kg	1.87 kg	1.87 kg

*Minimum to maximum external grip range with the included stock finger kit.

**Indicates usage at 87psi with stock finger kit with dry & clear surface conditions. Varies based on grip style, orientation, materials and input pressure.

^ Values may vary slightly based on certain application conditions. See online product page for more detailed information.

Custom EOAT for Cobot Applications



Features:

- **Designed for SCARA robots.**
- Quick Changer for quick set-up and tooling change over.
- Automatically engages pneumatic and electrical circuits.
- Padded fingers for an increased friction hold and softer touch to prevent damage.
- SGP-S Precision grippers are used for small work pieces and accurate handling.

This custom EOAT was **\$1,346.00**



Features:

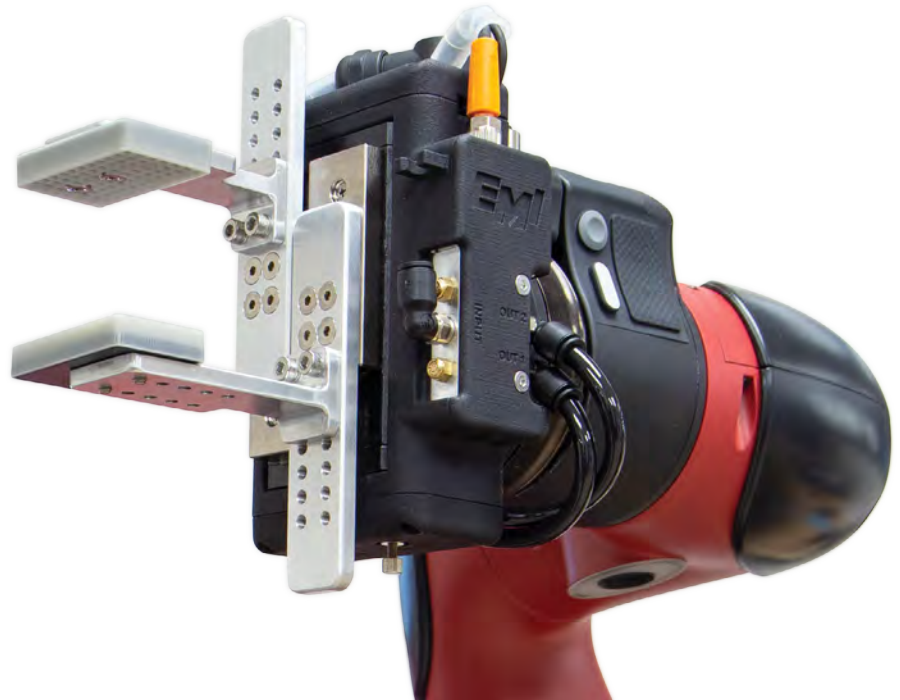
- Dual DH Parallel grippers with custom fingers.
- Part blow-off. (many options available)
- Direct mount with pass-through for tubing and cables.
- This solution caters to heavy duty machine tending applications at an affordable price

This custom EOAT was **\$4,633.00**

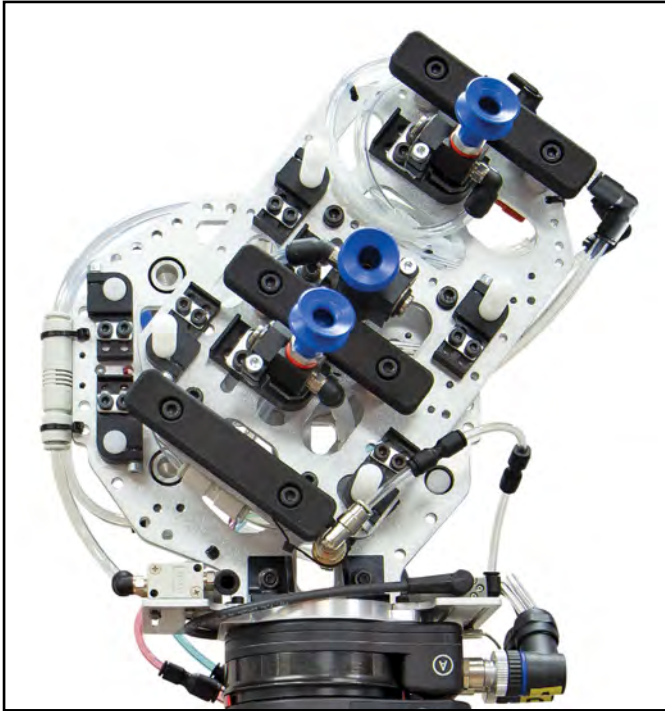
Features:

- Pneumatic PE-1640 gripper
- 40mm Gripper Stroke - Adjustable grip range: 45mm – 128mm
- Built-in 5/2 solenoid valve
- 3-Position teachable sensor
- Close/Open port flow controls
- 3D Printed shroud
- Silicone pads
- *ClickSmart® Ready

This custom EOAT was **\$1,995.00**



Custom EOAT for Cobot Applications



Using independent vacuum circuits, this EOAT grips 2 different parts out of an Injection Molding Machine, for placement into a secondary assembly process. Before placement, self-contained 180° rotary action is required for proper reorientation of a part. Once the secondary assembly is complete, the EOAT removes the final assembly.

On-board pneumatic valves control air flow to cartridge vacuum generators, and part confirmation is achieved through vacuum monitor switches. All I/O operates through ClickSmart connectors at Sawyer's wrist.

This custom EOAT was **\$3,048.00**

[Click here for more EOAT examples!](#)



OnRobot Soft Gripper Actuator for Cobots



Try It Risk Free!

*Contact us for details

The OnRobot Soft Gripper is able to pick a wide array of irregular shapes and delicate items, making it **ideal for pick-and-place applications**, as well as manufacturing or packaging. The gripper is available with three interchangeable silicon-molded cups.

The Soft Gripper operates without an external air supply, for no additional costs or complexity.

Quick# 8280
OR-103456

PRICE: \$4,378.00

* Actuator price only. Modules sold separately.

OnRobot pricing effective 3/1/2024 and subject to change.



Features:

- Actuator base weight: 0.77kg / 1.69lbs
- Actuator base dimensions: 84mm x 98mm.
- Smart lock tool mechanism and quick changer base included.
- Maximum payload of 2.2 kg depends on shape, softness, and friction of items to be handled, and grip dimensions range from 11mm to 118mm, depending on cup used.
- IP 67 Classification.
- Silicone is FDA 21 CFR 177.2600* & EC 1935/2004 approved
- Integrated software.
- Automatic tool center point (TCP) calculation, depth compensation, and payload calculation for UR.
- Dimensional drawing and technical information can be found on EMI's website.

NEW

Gripper Modules for Soft Gripper Actuator

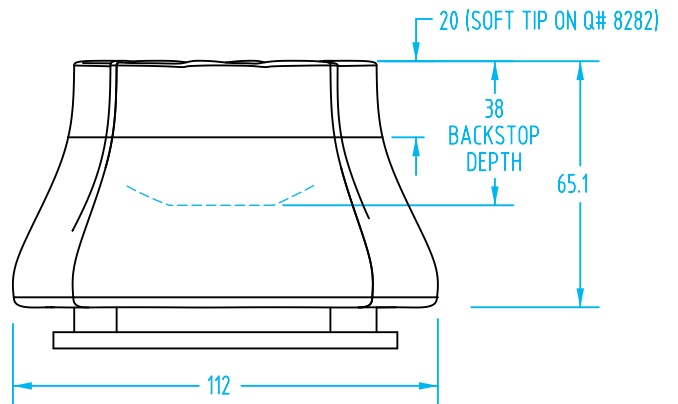
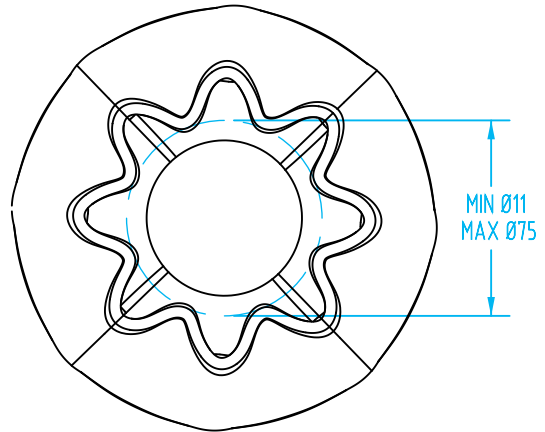
Quick#	Part#	Description	Max Payload*	Gripping Range	Price
8281	OR-103689	Soft	4.85 / 3.3 lb (2.2 / 1.5 kg)	11–75mm	\$1,042.00
8282	OR-103860	Extra Soft	4.85 / 3.3 lb (2.2 / 1.5 kg)	11–75mm	\$1,042.00
8283	OR-103691	Claw	2.42 lb (1.1 kg)	24–118mm	\$1,042.00

* Test object: 3D-printed ABS cylinder Ø65mm. Payload depends on shape, softness, and friction of the product.

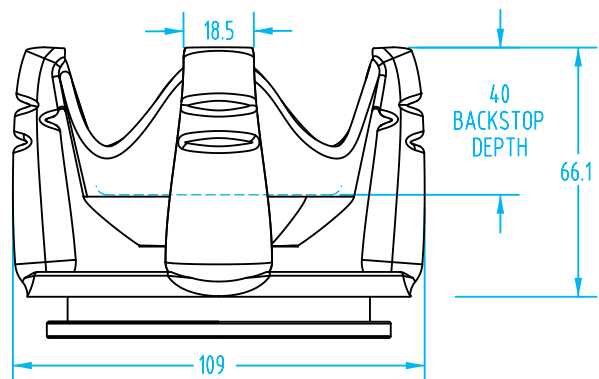
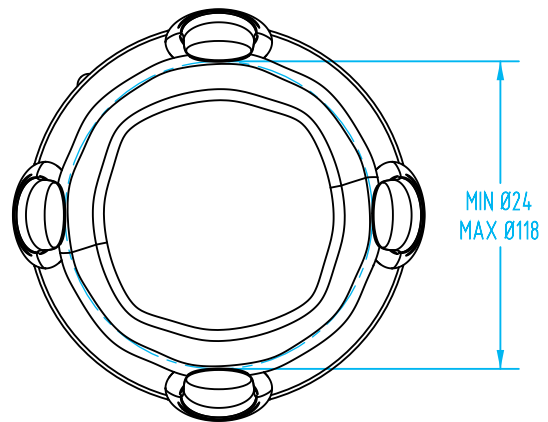


OnRobot Soft Gripper Actuator for Cobots

(Dimensioned drawings shown at 50% scale)



**Need to handle delicate plastic parts?
Try a Soft Gripper from EMI!**



Ubiros® Gentle Duo Mini Gripper for Cobots



Gentle Duo Mini grippers provide an optimal balance of versatility and grip stability in handling delicate objects or products that vary in size, shape, and weight during primary packaging.

Gentle Duo Mini Touch (Q# 8302) adds extra control for handling more complex applications.

Quick# 8301
PRICE: \$2,400

With Force Feedback
Quick# 8302
PRICE: \$3,800



Features:

- Digital output force feedback for part confirmation on Touch model.
- Integrated software accessible through wifi for configuring grip positions and calibrating fingers.
- Common interface plate mounts on all ISO flanges from 31.5mm to 63mm.
- Mount hardware and interface cable included.
- URCap available for simplified use.
- Overall height: 172.5mm, Base OD: Ø104mm
- Dimensional drawing and further technical information can be found on EMI's website.

Quick#	8301	8302
Part#	GNT-DUO-2F-0	GNT-DUO-2F-T
Price	\$2,400.00	\$3,800.00
Part confirmation	No sensing	Adjustable force feedback
Gripper control	1 input, 2 positions	2 inputs, 4 positions Force control
Payload (at 2A)*	3.3 lb (1.5 kg)	
Gripping time	100ms/ 50mm	
Input voltage	15V - 25V	
Max. current	0.03A (idle) / 2A (load) / 3A (instantaneous)	
Finger material	Silicone (FDA approved)	
Weight	800g (1.8 lb)	

*Actual payload dependent on workpiece properties: geometry, material, surface qualities, etc.



Ubiros Gentle Duo Mini Gripper for Cobots

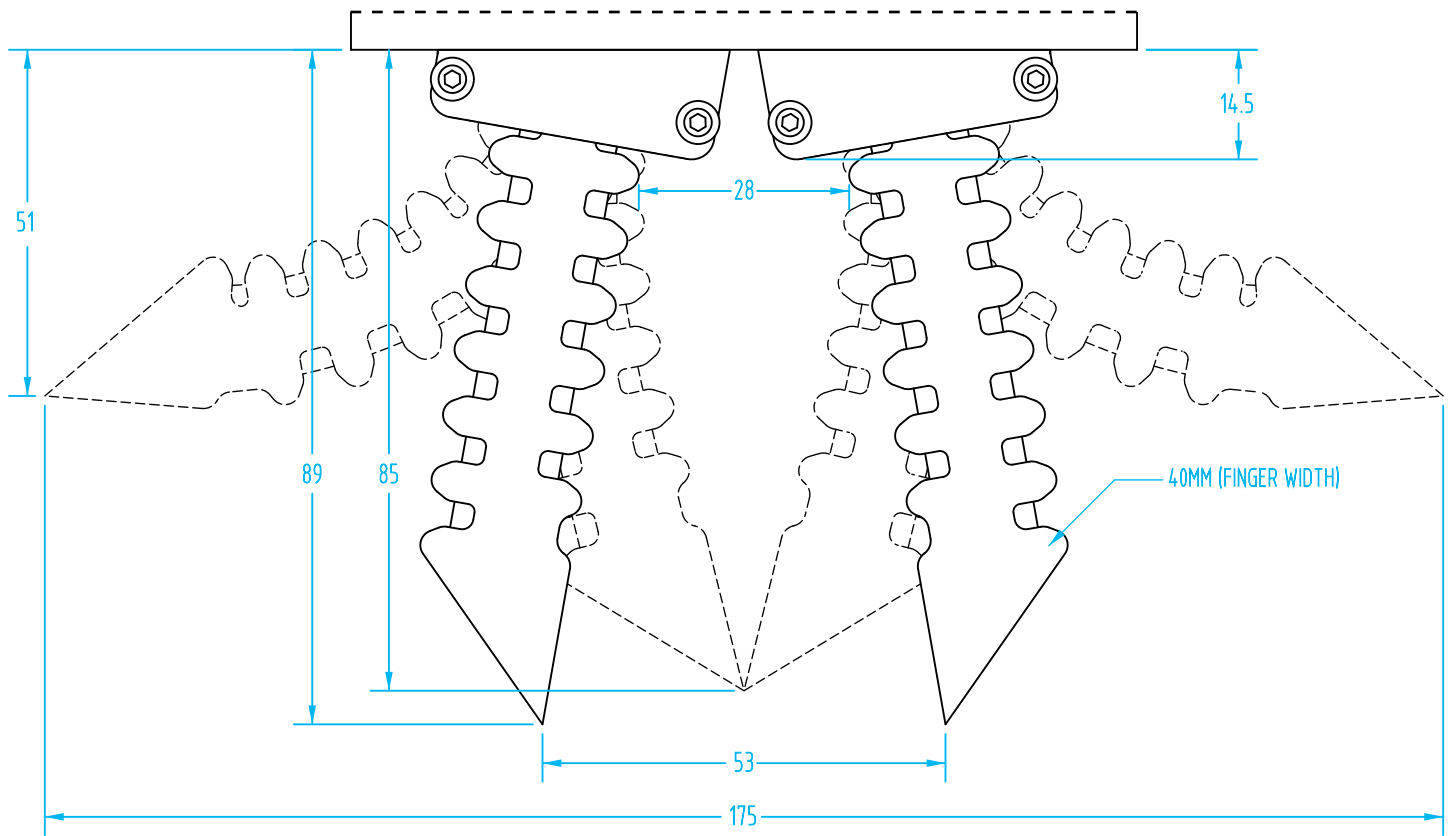
(Dimensioned drawings shown full scale)



Wi-fi Enabled Web App for Configuring Gripper

Try It Risk Free!

*Contact us for details



FINGER OPENING MAY VARY DUE TO CALIBRATION

piSOFTGRIP® Three Finger Grippers

(Dimensioned drawings shown full scale)

Cost effective, simple and robust. This silicone gripper is ideal for sensitive and lightweight object handling. Made in detectable silicone approved for direct contact with food, in accordance with FDA 21 CFR and EU 1935/2004 regulations. Gripper is actuated using a vacuum circuit.

It comes with a male G1/8" fitting which makes it compatible with our wide range of vacuum posts, suspensions and 3D printed supports. An optional stainless-steel fitting offers wash-down provision to assist cleaning is available upon request.

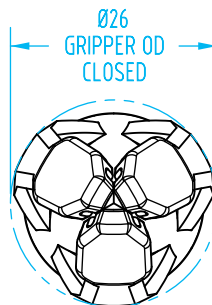
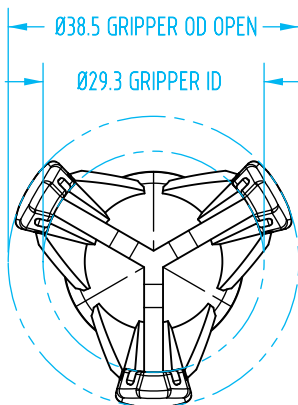
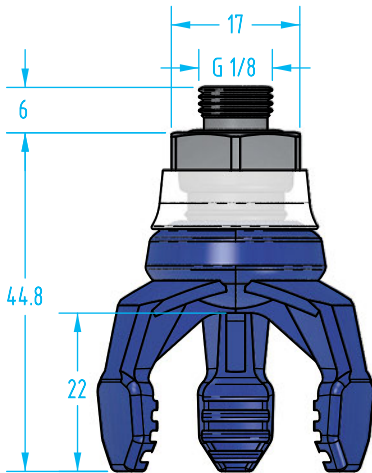
Piab SoftGrip	Size 30	Size 50
Quick#	8070	8080
Part#	CRG-PSG30-3S-G18M	CRG-PSG-3S-G18M
Price	\$88.45	\$140.13
Weight	11.6g	55g
Temperature range	-4--212°F	
Recommended vacuum level	0.4–0.9 Bar	0.2–0.6 Bar
Maximum object size	29mm	62mm
Maximum payload	50g	250g
Connection	Male G1/8"	
Finger / Claw material	Detectable Silicone 70° Shore A	



Quick# 8080
PRICE: \$140.13

Quick# 8070
PRICE: \$88.45

Size 30, #8070:



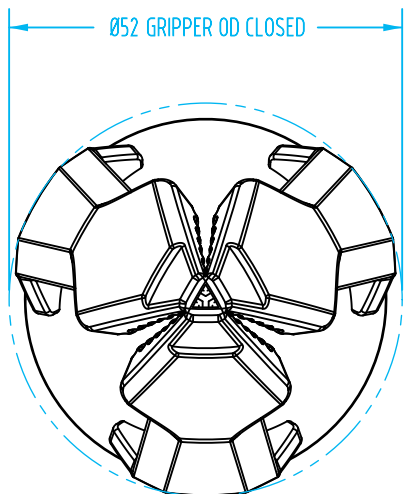
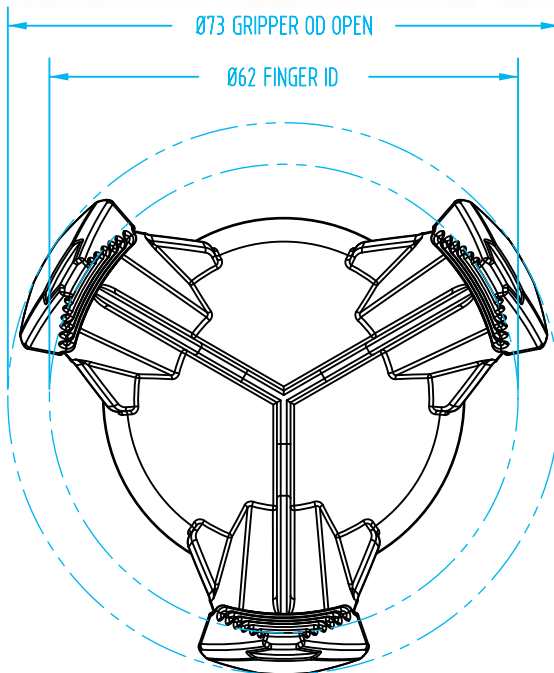
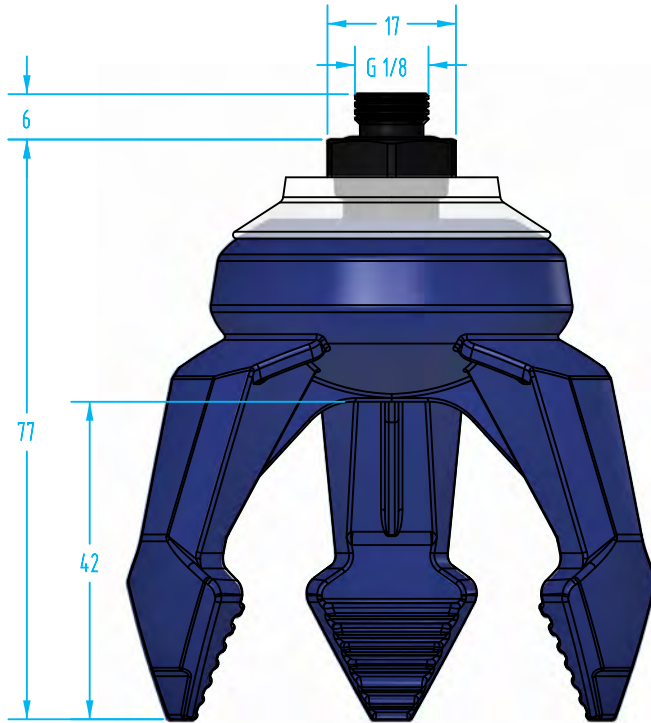
Quick# 8070 & Quick# 8090 Schmalz CobotPump Electric vacuum generator

piSOFTGRIP Three Finger Grippers

(Dimensioned drawings shown full scale)

**Cost Effective
Soft Grippers!**

Size 50, #8080:



Quick# 8080, Ø10mm Mono
Clamp Quick# 8101, & Vacuum
Post Quick# 5732.

piSOFTGRIP® Two Finger Gripper

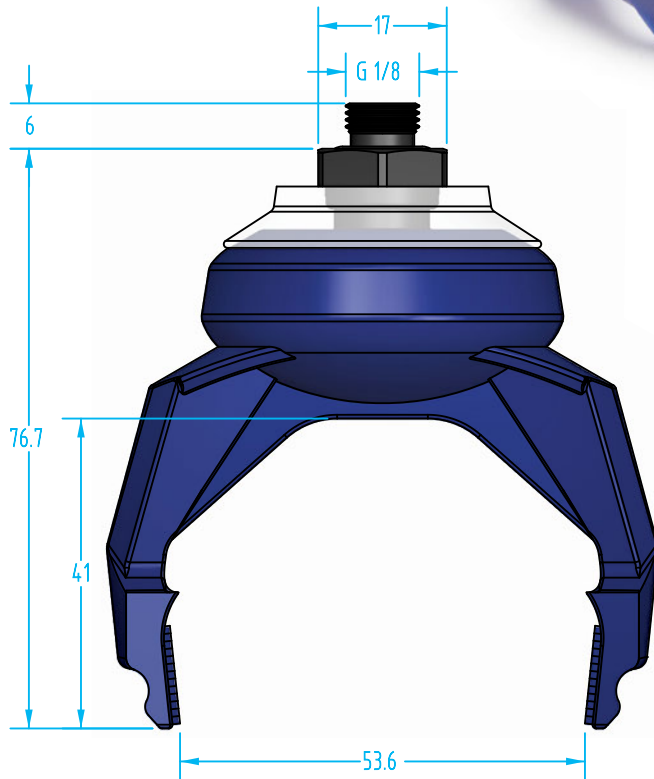
This two-finger vacuum-based soft gripper can grip sensitive and lightweight objects with odd geometries and/or objects with an unusual surface. Made in detectable silicone approved for direct contact with food, in accordance with FDA 21 CFR and EU 1935/2004 regulations.

It comes with a male G1/8" fitting which makes it compatible with our wide range of vacuum posts, suspensions and 3D printed supports. Available with wash-down fitting, see Quick# 8073 on our website.

Easy Vacuum Actuation!

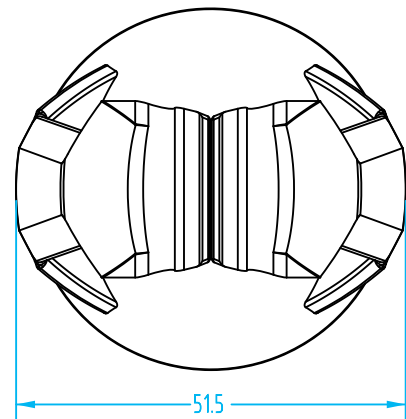
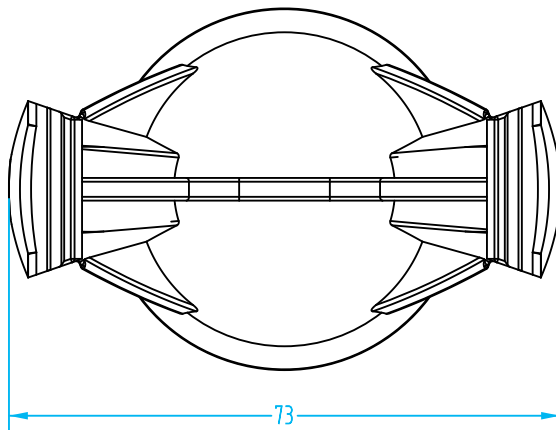


Quick# 8071
PRICE: \$119.31



NEW

Piab SoftGrip	Size 50
Quick#	8071
Part#	CRG-PSG50-2S-G18M
Price	\$119.31
Weight	43g
Temperature range	-4-212°F
Recommended vacuum level	0.4-0.9 Bar
Maximum object size	53.59mm
Maximum payload	150g
Connection	Male G1/8"
Finger / Claw material	Detectable Silicone 70° Shore A



piSOFTGRIP Two Finger Gripper



View our Soft Gripper Overview Video showing the OnRobot, Ubiros, and piSOFTGRIP!

Connects to your Existing EOAT Components



OnRobot Magnet Gripper MG10 for Cobots



OnRobot's MG10 is a versatile, easy to use magnetic gripper for material handling, assembly and machine tending applications in manufacturing, automotive and aerospace environments. Fully compatible with all major robot brands through OnRobot's One System Solution, the MG10 offers unique adjustable force and grip detection features that provide users with unprecedented levels of control.

Quick# 8212
OR-105202
PRICE: \$3,066.00

OnRobot pricing effective 3/1/2024 and subject to change.



Technical Specs	
Payload	0.002–22.046 lb (0.001–10 kg)
Workpiece size	Ø65.4mm (Ø2.574 in)
Magnetism resolution	100 steps
Gripping time	300 ms
Storage temperature	32–131°F (0–55°C)
IP Classification	IP67
Weight	800g (1.763 lb)

Features:

- Reliable gripping with variable force.
- Built-in proximity sensor to automatically detect the workpiece.
- Includes exchangeable fingertips for handling cylindrical objects.
- Includes protective pads (shown above).
- Safe, consistent grip even after power loss.
- Integrated software.
- No compressed air needed.

OnRobot Gecko Gripper for Cobots

The Gecko Gripper uses millions of micro-scaled fibrillar stalks that adhere to a surface using powerful van der Waals forces — the same way that geckos climb. It's possible to attach and lift any type of flat and smooth surfaces without compressed air or any external power, using easy gripping technology for Pick & Place applications.

Gecko Grippers

Quick#	Part#	Ø Pad	Max Suggested Payload	Price
8251	OR-104086	35mm	2.20 lb (1 kg)	\$853.00
8252	OR-104087	60mm	6.61 lb (3 kg)	\$853.00
8253	OR-108088	75mm	11.02 lb (5 kg)	\$853.00

Note: Robot-side quick changer is required. See page 120 for OnRobot Quick Changers. OnRobot pricing effective 3/1/2024 and subject to change.



EMI Gripper Kit – Magnet Gripper for Industrial Cobots

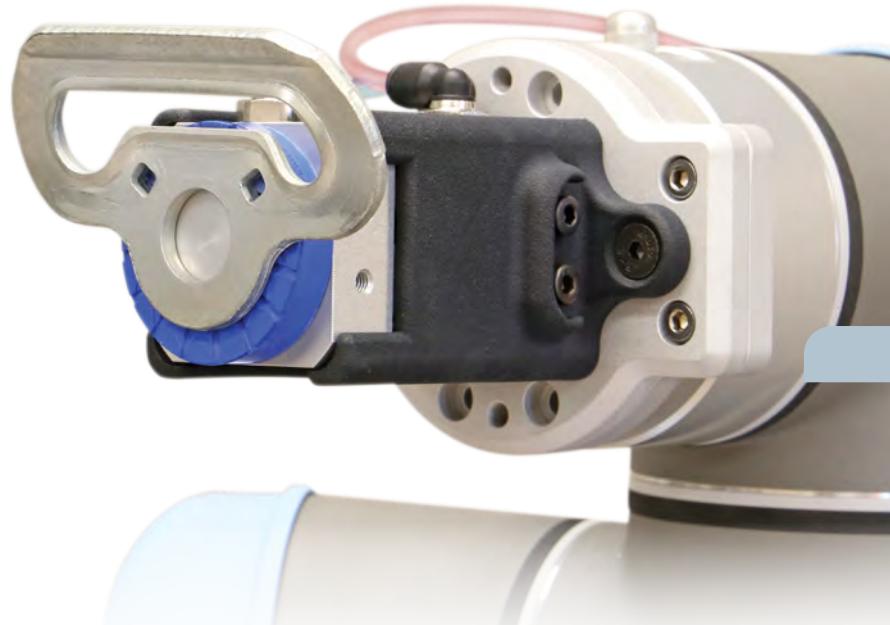
The MAG Gripper Kit is ideal for insert loading!

The MAG Gripper Kit offers customization with the ability to mount custom-made nests and sensors to make sure the part is picked, held and placed accurately.

Quick# 8003
CRK-MAG40-A
KIT PRICE: \$695.⁰⁰

Try It Risk Free!

*Contact us for details



Quick#	Part#	Holding Force*	Remaining Force	Operating Pressure	Operating Temp.	Wt. of Gripper
1993	SGM-30-G18-IG	7.8 lbf	0.06 lbf	50.7–87 psi	41°–158°F	130g
1994	SGM-40-G14-IG	22.4 lbf				240g
1995	SGM-50-G14-IG	40.4 lbf				440g

*Note: The value given is a static value with no safety factor; based on a plate with a thickness of 2mm, with friction ring installed. For system configurations with magnetic grippers, a safety factor of $S = 3$ must be applied.

Features:

- This versatile kit can be adapted to other SGM Gripper sizes with various gripping forces upon request.
- Double acting with 5/2 solenoid valve and cable management clamps.
- The included interface plate mounts directly to any robot with an ISO-9409-1-50-4-M6 tool flange. Contact EMI if you need a different interface plate.
- Replaceable polyurethane ring for delicate handling and added friction.
- CRK-MAG40-A Mass: 555g (subject to change per configuration).
- For more information, see MAG gripper page 592.



CRK-MAG40-A Gripper Kit Includes:



5/2 Solenoid valve with fittings, mufflers, and non-slip Velcro® strap.



Two cable management clamps with non-slip Velcro strap.



Package with 3D printed insert for storage.



Interface plates, USB drive with URcap, and user manual.

Accessories for Collaborative Robots

One-Time Purchase! Compatible with ALL EMI Grippers!

- Simple, on-arm design with protective shroud and non-slip Velcro® strap to mount to the robot arm.
- 5/2 Solenoid Valve - Single - Solenoid, monostable
- See page 1017 for more information.
- Includes User Manual.

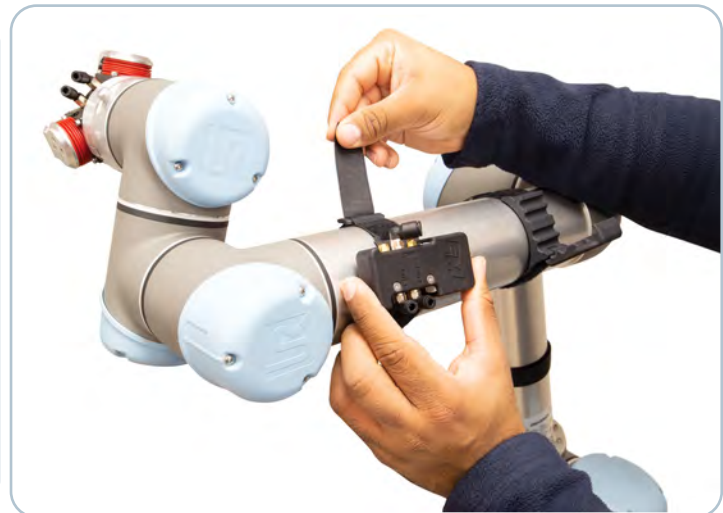
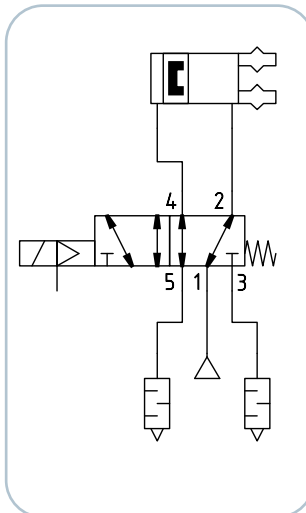


EMI's **Solenoid Valve Kit** is an essential add-on for pneumatic applications and cornerstone of all pneumatic end effectors.

Cobot Solenoid Valve Kit

Quick#	Part#	Price
8016	CRA-SVK-1	\$149.00

One Stop Shop for Cobot Accessories! Contact EMI for Custom Solutions!

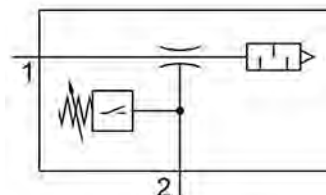


- Housing made of lightweight impact-resistant plastic.
- Connection of compressed air and vacuum with push-in 6mm.
- Operating temp: 32–122° F.
- Operating pressure: 1–8 bar.
- Kit includes User Manual, Silencer, Velcro strap, 3-Pin Cable, and Clear PU tubing.
- See Vacuum Generator on page 1017 for more information.

EMI's **Vacuum Generator Kit** operates off of a 24Vdc, mono-stable signal and is the ideal solution for vacuum EOAT. With an incorporated teachable vacuum switch, 3D printed housing and anti-slip straps, the VGK is a true plug and play solution for your cobot.

Vacuum Generator Kit with Teachable Vacuum Switch

Quick#	Part#	Tubing	Price
8021	CRA-VGK-1	Ø6mm	\$265.00



Accessories for Collaborative Robots

Easy to use!

Organize and secure pneumatic and electric lines running down your robot arm. Clamps have (4x) channels for tubing and cables up to 8mm diameter. The kit includes 2 clamps, one 12in. strap, and one 18in. strap that fit most Collaborative Robots.

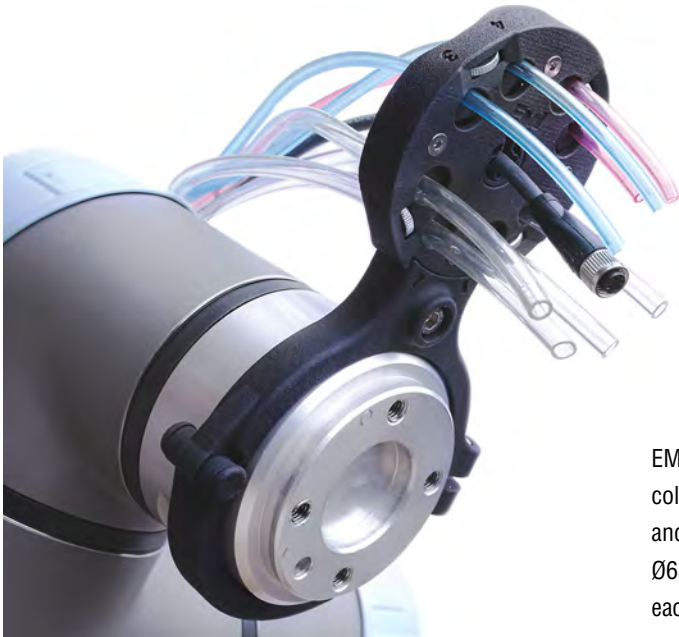
Cable Management Kit

Quick#	Part#	Tubing / Cable	Price
8015	CRA-CMK-1	Ø8mm max.	\$35.00



x2

Watch EMI's Wrist Wangler Video!



NEW

EMI's **Wrist Wrangler** is a cable and tubing management solution designed for collaborative robots. It clamps at the wrist of your robot and it helps organize cables and pneumatic lines for more complex EOAT or for multiple gripper tools. Available with Ø63mm, Ø75mm and Ø90mm robot wrist clamps, it can secure 8x conduits up to Ø10mm each with an additional grommet at the center for additional tubing and cables.

Wrist Wrangler

Quick#	Part#	Description	Price
8024	CRA-WW1-A3	Ø63mm Wrist Mount (for use with UR3)	\$184.00
8025	CRA-WW1-A5	Ø75mm Wrist Mount (for use with UR5)	\$189.00
8027	CRA-WW1-A10	Ø90mm Wrist Mount (for use with UR10 & UR16)	\$194.00

Spiral Polyurethane Tubing

Quick#	Part#	Description	Price
987	GSU-PCR-0424	Ø4mm Transparent Red, 2.6m long	\$21.35
988	GSU-PCB-0424	Ø4mm Transparent Blue, 2.6m long	\$21.35
996	GSU-PCC-0604	Ø6mm Transparent Clear, 2.6m long	\$23.33
997	GSU-PCR-0604	Ø6mm Transparent Red, 2.6m long	\$23.33
998	GSU-PCB-0604	Ø6mm Transparent Blue, 2.6m long	\$23.33

- Ø4mm spiral tubing has a maximum suggested working length of 2.6m, with a retracted coil length of 135mm.
- Ø6mm spiral tubing has a maximum suggested working length of 2.6m, with a retracted coil length of 150mm.
- Polyurethane straight tubing is available on page 1045.

Ideal to avoid tension between robot joints



NEW

Cobot Flange Mono Clamp

Compatible with your existing EOAT components!

- Available with Ø10, 14, 20, 30mm clamps.
- Can be printed to fit any Cobot.
- Compatible with our wide range of quick changers, vacuum posts, grippers or custom to fit your EOAT.

EMI's printed Cobot mono clamps are lightweight, cost effective and easy to use. Simply mount the clamp directly to your Cobot's ISO-9409-1-50-4-M6 tool flange or to our Cobot Quick Changer with the included hardware and spacer.



#8101



#8105

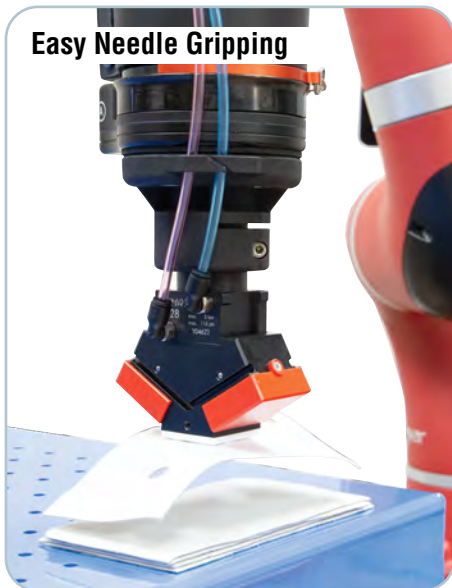
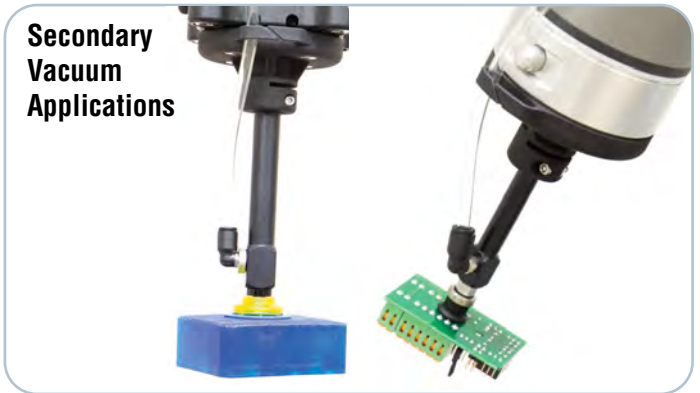
Cobot Flange Mono Clamp

Quick#	Part#	Clamp	Price	Wt. *
8101	CRM-MC10-A	Ø10	\$38.29	47g
8102	CRM-MC14-A	Ø14	\$42.61	49g
8103	CRM-MC20-A	Ø20	\$46.33	61g
8104	CRM-MC30-A	Ø30	\$49.82	71g

*Standard weight. The weight is slightly higher when using hardware to attach to the QC-75.

Mono-Clamp Spacer for Sawyer ClickSmart

Quick#	Part#	Price	Wt.
8105	CRA-MCRT-B	\$15.48	51g



Cables and Connectors

NEW

Power your Cobot End Effectors!

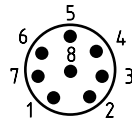
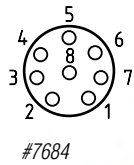
- Additional cables and connectors on page 984.
- Sensor diagrams and other specifications can be found on our online product pages at: www.EMICorp.com
- Contact us with any questions: Cobots@EMICorp.com



Extension Cables

Quick#	Part#	Description	Price
8082	GSE-RFC-M8-4P	4-Pin M8 Female Connector with leads, 5m long	\$16.00
2581	GSE-RCS-8FS-5000	8-Pin M8 Female Connector with leads, 5m long	\$26.75
7683	CFGM1200850P	8-Pin M12 Female Connector with leads, 5m long	\$40.56

- Use these flexible cables as an extension from electrical components using M8 and M12 4-Pin and 8-Pin connectors for wiring directly to the controller.



#7685 & #7686

Field Wireable M12 Connectors with Screw Terminals

Quick#	Part#	Description	Price
7684	CFGM1200800	8-Pin Female M12 Straight Connector	\$19.76
7685	CMGM1200800	8-Pin Male M12 Straight Connector	\$19.76
7686	CMGM1290800	8-Pin Male M12 90° Connector	\$32.00

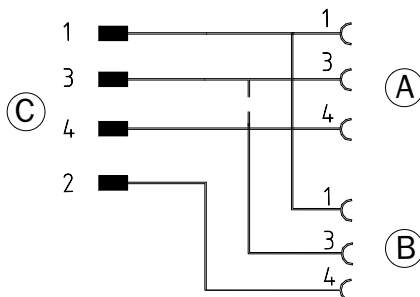
- Use these field wireable M12, 8-Pin connectors to extend cables from a quick changer and build custom wire harnesses.



Y-Splitter with M8 Connector

Quick#	Part#	Description	Price
8081	GSE-E12269	2x M8 3-pin female, 1x M8 4-pin Male	\$32.58

- Combine two sensor cables to simplify I/O requirements.



Short Connector Cables

Quick#	Part#	Description	Price
8088	CFGM8908CF8903010	3-Pin 90° M8 Female to 8-pin 90° M8 Female, 0.1m long	\$33.51
8089	CFGM8908CF8904010	4-Pin 90° M8 Female to 8-pin 90° M8 Female, 0.1m long	\$35.75
8079	CMGM800803P	8-Pin M8 Male Straight with leads, 0.3m long	\$27.92
8087	CFGM890802P	8-Pin M8 Female 90° with leads, 0.2m long	\$33.88

- Use #8088 & #8089 to connect electric grippers direct to the Tool I/O at the wrist of a cobot. Use #8079 & #8087 for wiring into a quick changer.



Continuous Flex Interface Cables

Quick#	Part#	Description	Price
8084	CRC-650-3P	3-pin M8 Male / Female, 650mm long	\$32.00
8085	CRC-750-3P	3-pin M8 Male / Female, 750mm long	\$32.00
8086	CRC-1000-3P	3-pin M8 Male / Female, 1000mm long	\$32.00

- Used extensively in EMI's cobot gripper kits, adapt for your needs!

OnRobot Compute Box

Powerful, Simple, Versatile

OnRobot Grippers are compatible with a wide variety of Robots using the Compute Box to communicate via Ethernet or Digital I/O interface. The Compute Box is also required for OnRobot's more advanced products: Dual QC, HEX Force/Torque Sensor.

OnRobot's WebLogic App can also be accessed through a computer to program your gripper remotely through Ethernet or while on the robot if you are using Digital I/O.



Ethernet



Digital I/O



OnRobot's Compute Box is needed with:

- All OnRobot Grippers to be used on robots other than UR®:
 - Doosan® Kuka® Kawasaki®
 - Hanwha® Fanuc® Nachi®
 - Techman Robot® Yaskawa® Other
- Dual Quick Changer on any robot, including UR.
- Hex Force/Torque Sensor on any robot, including UR.
- A computer to access WebLogic App.

Box Includes:

- Compute box
- 5m Cable (M12 to M8)
- UTP Cable (RJ45 to RJ45)
- Power supply
- USB stick
- 4x Cable strap
- 3x Terminal blocks
- 8x I/O Wires

OnRobot Compute Box

Quick#	Part#	Description	Price
8231	OR-102344	Works with Various Robot Models. Interface plates sold separately.	\$986.00

OnRobot pricing effective 3/1/2024 and subject to change.



OnRobot Adapter Plate K for Techman / Omron

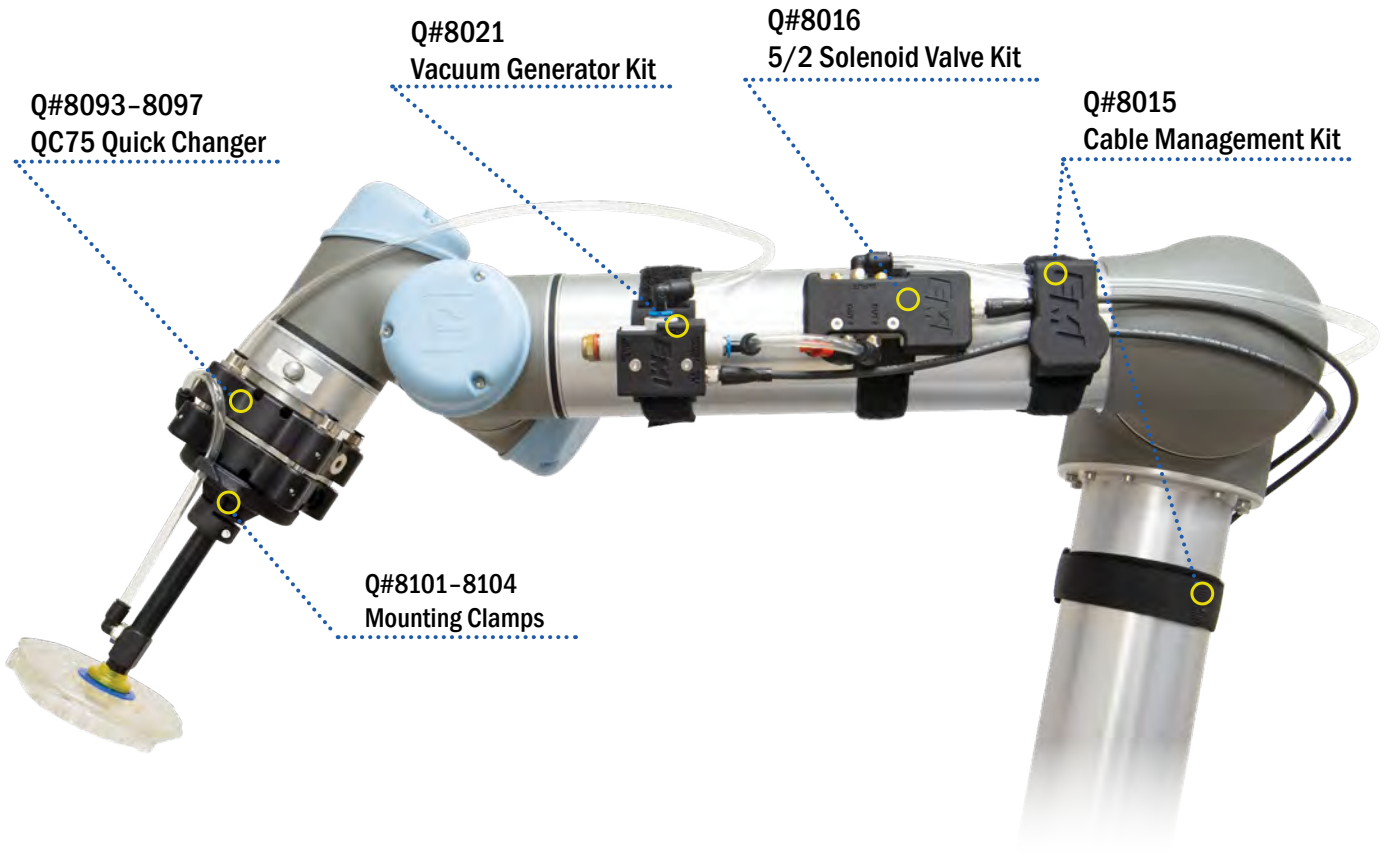
Quick#	Part#	Description	Weight	Price
8269	OR-101850	Plate K for Techman / Omron ISO 9409 Mount Pattern	151g	\$128.00



OnRobot ABB Interface Cable

Quick#	Part#	Description	Price
8239	OR-113690	For ABB Gofa - Connects to the Robot Wrist I/O	\$409.00

Accessories for Collaborative Robots



Subscribe to our YouTube Channel

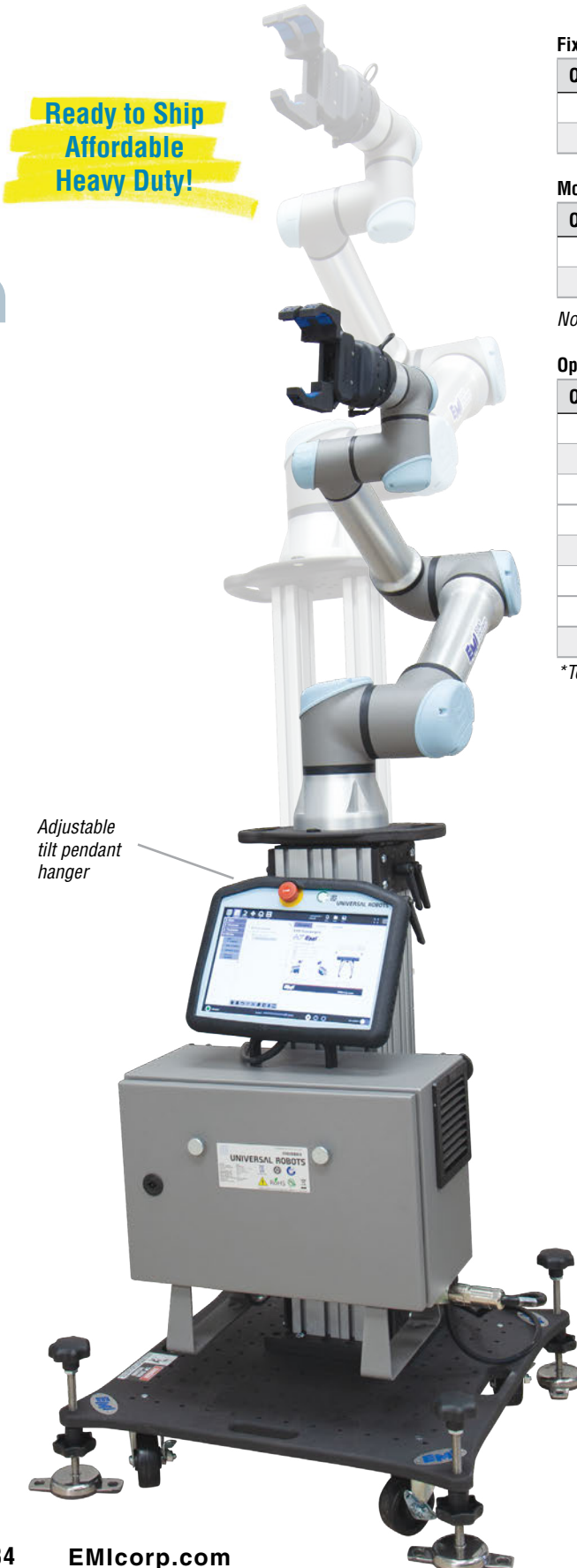
Visit and subscribe to EMI's YouTube channel to watch the latest videos on our EOAT products!

We are constantly adding new content to our YouTube channel. From product overviews to in-depth how-to videos, we are sure you'll find our videos helpful. Click the play button below to watch our EOAT for Cobots video!



Adjustable Height Industrial Cobot Stands

EMI's Cobot Stands extend the reach of a cobot arm. These heavy-duty stands are perfect to an industrial environment where redeployment and adjustability may be required.



Ready to Ship
Affordable
Heavy Duty!

Fixed Base (Aluminum Profile Riser) with Adjustable Height

Quick #	Part #	Description	Wt.	Price
8920	CRS-FA-2339	23.7"-39.9" OAH	59 lbs	\$1,610.00
8921	CRA-FA-3054	30.8"-54" OAH	65 lbs	\$1,662.00

Mobile Base (Aluminum Profile Riser) with Adjustable Height

Quick #	Part #	Description	Wt.	Price
8901	CRA-MA-2844	28.5"-44.5" OAH	167 lbs	\$2,920.00
8902	CRS-MA-3558	35.5"-58.8" OAH	173 lbs	\$2,972.00

Note: The mobile base unit adds roughly 4.7" to the overall height.

Optional Accessories

Quick #	Part #	Description	Price
8940	CRS-CBM-UR	UR Control Box Mount for Cobot Stand	\$35.00
8943	CRS-CBM-DO	Doosan / Fanuc CRX Control Box Mount	\$204.00
8945	CRS-CBM-TM	Techman Control Box Mount w/ Swivel	\$204.00
8941	CRS-TPH-UR	UR Pendant Hanger w/ Adj. Tilt Angle*	\$99.00
8944	CRS-TPH-DO	Doosan Pendant Hanger w/ Adj. Tilt Angle	\$109.00
8946	CRS-TPH-CRX	Fanuc CRX Pendant Hanger w/ Adj. Tilt Angle	\$136.00
8942	CRS-CM-1	Cobot Stand Cable Management (x2)	\$39.00
2809	CRA-DRM-1	Din Rail Mount Bracket Kit (includes hardware)	\$37.89

*Teach pendant hanger includes bracket for older model (CB-Series) UR Teach Pendant



Mounting pattern compatible with:

UNIVERSAL ROBOTS
UR3/e, UR5/e, UR10/e, UR16/e

FANUC
CRx-10iA, CRx-10iA/L

DOOSAN

A0509, A0509S, A0915, A0912S, M0609, M0617, M1013, M1509, H2017, H2515

TM
ROBOT

TM5, TM12, TM14

UR Universal Robots, Doosan, TM Techman Robot, and Fanuc are trademarks of their respective owners.

Fixed Height Industrial Cobot Stands

Watch EMI's Cobot Stand Video!

Fixed Base (Steel Riser) with Fixed Height

Quick #	Part #	Description	Wt.	Price
8930	CRS-FF-30	30.6" OAH	68 lbs	\$1,271.00
8931	CRS-FF-36	36.9" OAH	71 lbs	\$1,346.00
8932	CRS-FF-42	42.5" OAH	79 lbs	\$1,421.00
8933	CRS-FF-48	48.7" OAH	87 lbs	\$1,496.00

Mobile Base (Steel Riser) with Fixed Height

Quick #	Part #	Description	Wt.	Price
8910	CRS-MF-35	35.3" OAH	176 lbs	\$2,581.00
8911	CRS-MF-41	41.6" OAH	179 lbs	\$2,656.00
8912	CRS-MF-47	47.2" OAH	187 lbs	\$2,731.00
8913	CRS-MF-53	53.5" OAH	195 lbs	\$2,806.00

Note: The mobile base unit adds roughly 4.7" to the overall height.

Find our new Electronically-driven riser Cobot Stand models and new Heavy-duty fixed height Cobot Stand Online, [Click here!](#)

Custom height options and configurations are available upon request!

Optional Accessories, see page 184.



Optional UR Control Box Hanger



Optional Doosan Adjustable Tilt Pendant Hanger



Cable Management (2x included with Stand)

Mounting plates for all cobots available

Cable management with pass-through for tubing

Stand can be placed anywhere on base

Castors and leveling pads included



Cobot Ready Conveyors

EMI has developed a conveyor package to easily integrate with your Collaborative Robot.

Our conveyors are Certified by Universal Robots. With EMI's URcap development, any Universal Robot can easily control the conveyor's speed and direction.

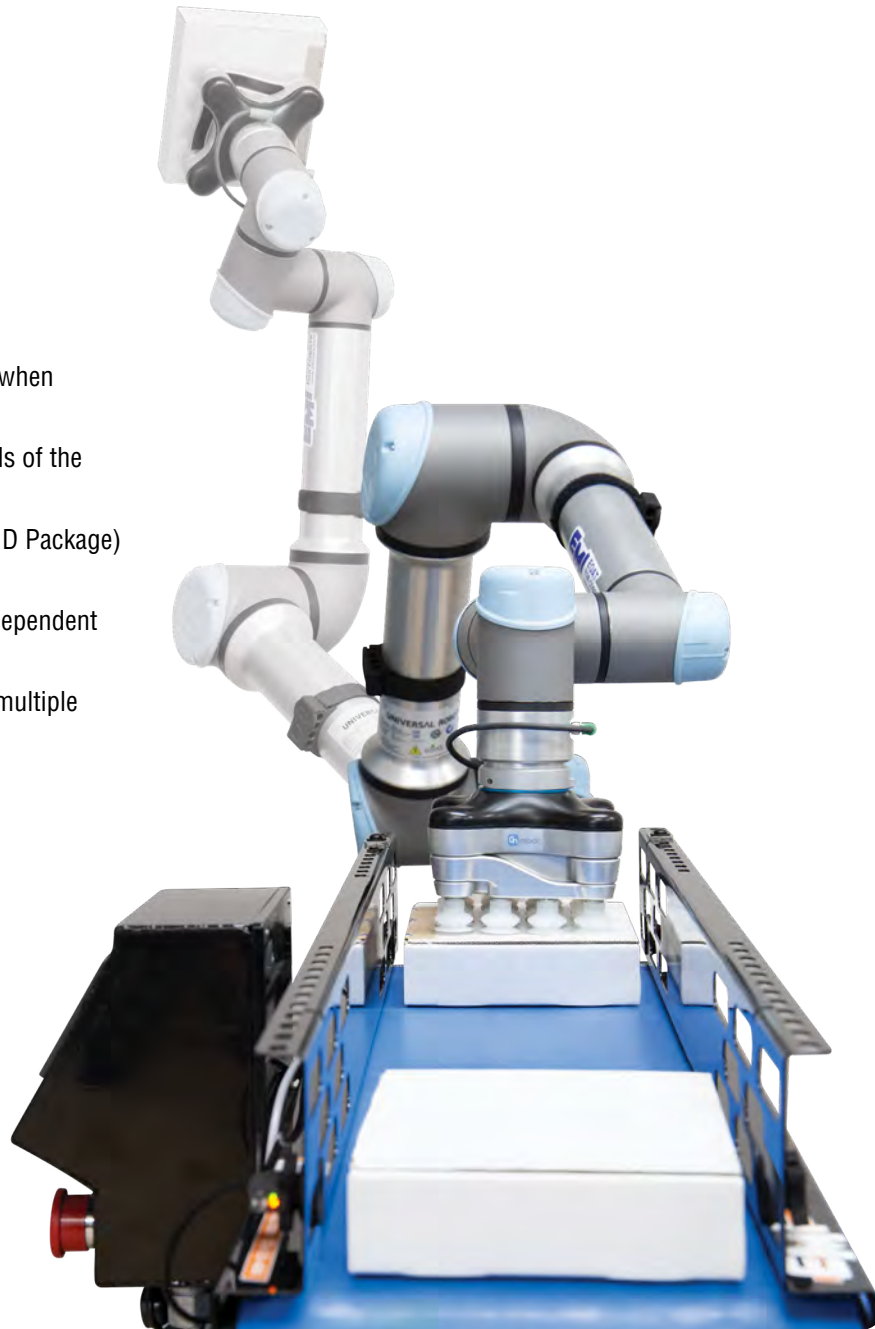
With every Cobot Conveyor:

- EMI URcap allows for easy programming and use when integrated with your UR Robot.
- Two photo-eyes (1 at infeed and 1 at discharge ends of the conveyor).
- Variable Speed, Internal Motor Drive Package (EA-ID Package) or External Drive. (See below)
- Compact touch screen speed control allows for independent control, if necessary.
- 4" x 90° 12ga. Steel powder coated side rails with multiple photo eye mounting positions.
- Adjustable leg sets with 4" swivel, locking castors.



[Click here to view our Cobot Ready Conveyor Brochure](#)

[Click here to download the Cobot Ready Conveyor Order Form](#)



Choose Either Internal or External Drive:

Internal Drive Package: (Extruded Aluminum Model Conveyors Only)

- MODBUS communication via Ethernet (EA-PLC-UR Electrical Package).
- Single V-guide polyurethane belting.
- Power: 110V/ 5amp.
- Maximum load: 50lbs.
- Maximum belt speed: 70ft per minute*.
- Belt widths: 4"-60" at 2" increments.
- Belt lengths: starting at 4ft.

*Belt speed may vary based on overall length and width

External Drive Package:

- Steel or aluminum frame.
- MODBUS communication via Ethernet (T-99 Electrical Package).
- Power: 110V/ 5 amp.
- Maximum load: varies by conveyor model.
- Belt widths: varies by conveyor model.
- Belt lengths: starting at 4ft.
- Speed: 20, 40, or 80 feet per minute.
- Variable frequency drive as compared to EA-ID.

Cobot Ready Conveyors

URCap Features:

- MODBUS communication via Ethernet Cable
- Simple UR pendant interface
- Variable speed control
- Directional control
- Detect workpiece presence
- User Manual

Suitable Applications:

- Machine tending
- Injection molding
- Material handling
- Pick and place
- Box filling



	Extruded Aluminum	Extruded Aluminum	Trim Line	Merit Line	Clean Room	Signature Line
Electrical Package	Internal Drive with EA-PLC-UR Package		External Drive with T-99 Cobot Controller Package			
Price for standard Cobot Ready Flat Belt Conveyor (18" wide by 10' long) <i>Other sizes available</i>	EAF-18-10-40 \$4,910	EAF-18-10-40 \$5,007	STL / ATL-18-10-40 \$4,809	ADF-18-10-40 \$5,345 DDF-18-10-40 \$5,555	ACRF-18-10-40 \$5,631	RM-18-10-40 \$5,835

Pricing effective 08/01/2022

To request more information, call 216-535-4848 or email us at Sales@EMICorp.com