

Quick Changer Overview

The Senvex/WGS, Gimatic, and >ASS< Quick Changers are industry proven for use on robots tending to injection molding machines. From 50 - 3500 tons, EMI has the right sized QC to suit the size range of EOATs anticipated for use with your machines.

Quick Changer Advantages

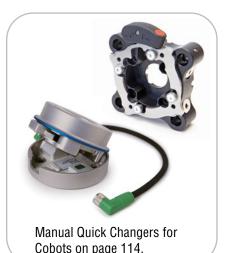
Precision
 Quick changers assure that the EOAT will be perfectly positioned each time it is mounted to the robot. In addition to helping to prevent damage to the mold or the EOAT, this can also greatly reduce the amount of fine-tuning needed upon set up.

Efficiency
 The SENVEX/WGS, Gimatic and >ASS< Quick Changers quickly and automatically make
all pneumatic and electrical connections when both halves are locked into place. This
can be especially time saving when an EOAT has multiple air, vacuum, or electrical
connections and also ensures a repeatable installation.

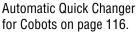
Safety
 Using a quick changer that automatically connects air, vacuum and electrical (such as the SENVEX) assures that each time the EOAT is mounted, all of the connections will be correct (i.e. primary vacuum, secondary vacuum, primary air, secondary air etc.).

 Standardization Uniform dedication of air and vacuum ports on all quick change applications throughout the plant allow EOAT to be mounted quickly wherever it is needed.











Dovetail to Round QC Transition at your own pace on page 78.



Quick Changer Overview







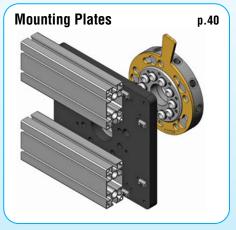




















EOAT Quick Changer

Use this EOAT Quick Change system for Simpler, Faster, and Safer EOAT changes.

This Quick Change Adaptor handles end-of-arm tooling's for molding machines 50–3500 tons. The combined robot and EOAT-Sides weigh only 1.4 pounds, yet it can handle large-size EOATs. Its light weight allows for fast robot speeds. Its high strength allows it to be used on large machines with large EOATs. (See specifications) Up to 12 air ports and 30 electric signals are available depending on the size and configuration.

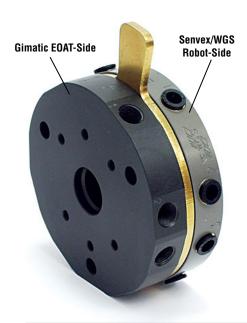
When the EOAT-Side is connected, the air lines and electrical signals are automatically coupled the same way every time. By standardizing port 1 to be the primary vacuum circuit, port 2 to be the secondary vacuum, port 3 to be primary gripper circuit, etc., your EOATs can easily be interchangeable on all your machines. Your connections will always be correct, with no chance of crossed vacuum lines or electrical signals.





EOAT Quick Changer

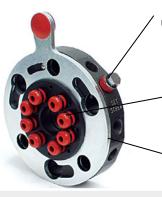
Standard (90mm) and Large (150mm) Senvex*/WGS, Gimatic*, and >ASS< Quick Changers are Interchangeable. Matching Electrical Connector pairs are able to be used whether the QC sides are matching or non-matching.







Gimatic Robot-Side



"Zero Tolerance" set screw can be used with both Gimatic and Senvex EOAT-Sides, but is not required for use with either Gimatic or Senvex.

Molded plastic fittings with O-rings.

No integrated push-in fittings. Threaded ports require fittings to be purchased separately. See dimensional drawings on the following pages to determine port size.

Senvex/WGS Robot-Side

No secondary set screw keeps set-up a simple, one-step process; lock the lever and you're done. Very close locking tolerances with locking lever alone.

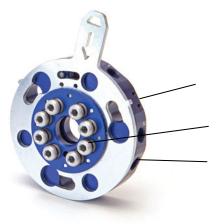
Machined aluminum fittings with 0-rings.

Integrated 6mm push-in fittings on standard 90mm quick changer.
Threaded G1/4" ports on large 150mm Quick Changer requires fittings to be purchased separately.





A close-up view of the tapered, hardened steel set screw shows how it friction locks against the EOAT-Side's locating pins to eliminate any play between the two quick changer sides.



SUMMARY: Without using a set screw, the Senvex WGS quick changer will provide a closer, tighter lock than the Gimatic quick changer (without engaging set screw). However, if you DO engage the set screw with every tooling change, the Gimatic quick changer will provide a closer, tighter lock.

An optional sensor bracket mounts on the EOAT-Side QC and a sensor signals when QC lock is engaged.

Machined aluminum fittings with O-rings.

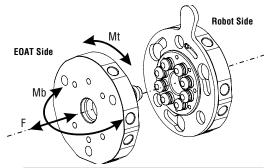
No integrated push-in fittings. Threaded ports require fittings to be purchased separately. See dimensional drawings on the following pages to determine port size.



Standard Size (90mm) Quick Changer

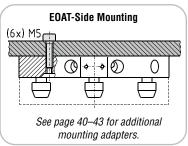


(Dimensioned drawing shown full scale)

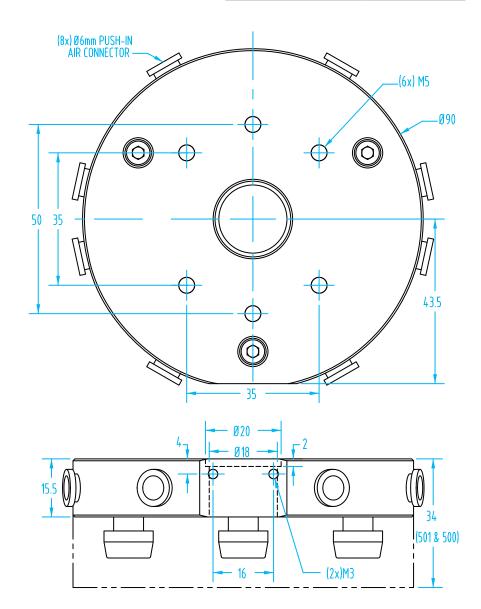


Specifications			
Majabt	Robot-Side	332g	
Weight	EOAT-Side	234g	
Maximum Air Pressure		6 bar (87psi)	
Air Ports		(8X) Ø6mm O.D. tube	
Electrical Connector		Optional	
Safety Loads:			
F 90 lbs. N	/It 74 ft-lbs.	Mb 44 ft-lbs.	

The standard version of the EOAT Quick Changer is designed to handle EOATs that are typically used on injection machines sized from 50–500 tons. This will generally handle EOATs weighing up to 25 lbs.









Standard Size (90mm) Quick Changer

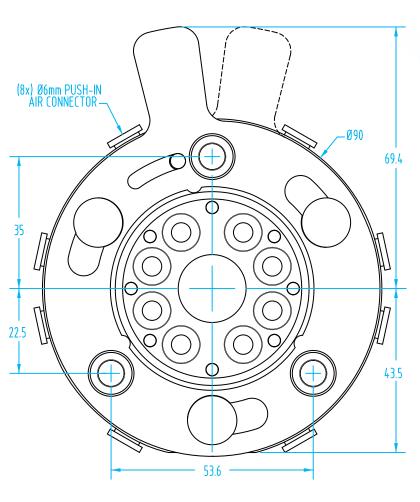
(Dimensioned drawing shown full scale)

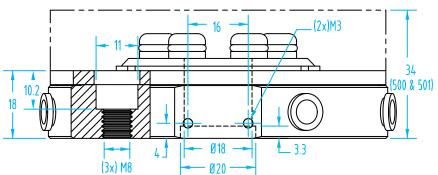
Standard EOAT Quick Changer

Quick#	Part#	Description	Price
500	GSQ-R	Robot-Side - Standard size (90mm)	\$490.00
501	GSQ-G	EOAT-Side - Standard size (90mm)	\$275.00
502	WGS-QLEKRD	Robot-Side Electrical Connector & Cable	\$81.00
503	WGS-QLEKGD	EOAT-Side Electrical Connector & Cable	\$81.00
6545	QC90-H	Horizontal EOAT Storage Hanger (pg. 59)	\$32.86
5997	QC90-V	Vertical EOAT Storage Hanger (pg. 59)	\$32.86
1791	GSQ-CP-QC90	Quick Changer Centering Pin (pg. 37)	\$26.00

Additional Electrical Connectors available on page 30.

Use Quick#s for easy online ordering.





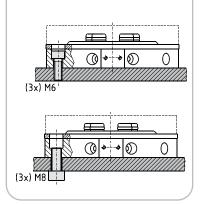


#500 - Standard Robot-Side Quick Changer



Robot-Side Mounting Options

The robot-side quick changer can be mounted two ways: Use M6 when tapping into your robot plate from the front. Use M8 when making a thru hole in your robot plate to use the M8 threads in the quick changer.





Large Size (150mm) Quick Changer

Standardize your EOAT mounting interface for all your machines!

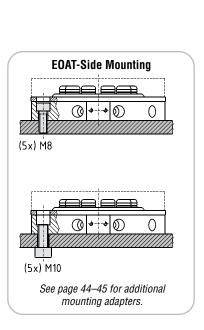


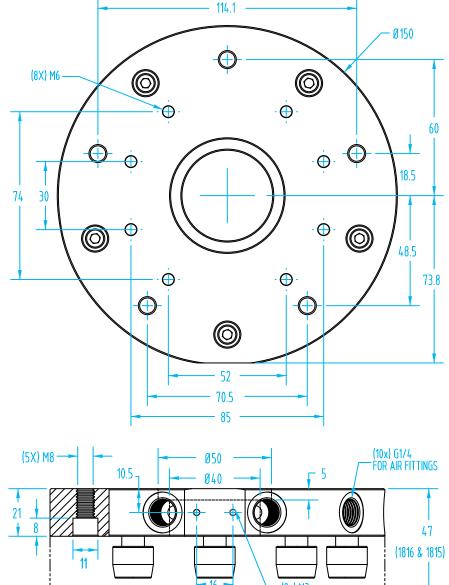
(Dimensioned drawing reduced to fit)

Robot Side

Specifications				
Weight	Robot-Side	1260g		
	EOAT-Side	930g		
Maximum Air Pressure		6 bar (87psi)		
Air Ports		(10X) G1/4"		
Electrical Connector		Optional		
Safety Loads:				
F 225 lbs.	Mt 184 ft-lbs.	Mb 74 ft-lbs.		

The larger version of the EOAT Quick Changer is designed to handle EOATs that are typically used on injection machines sized from 500–2,000 tons. This will generally handle EOATs weighing up to 75 lbs.





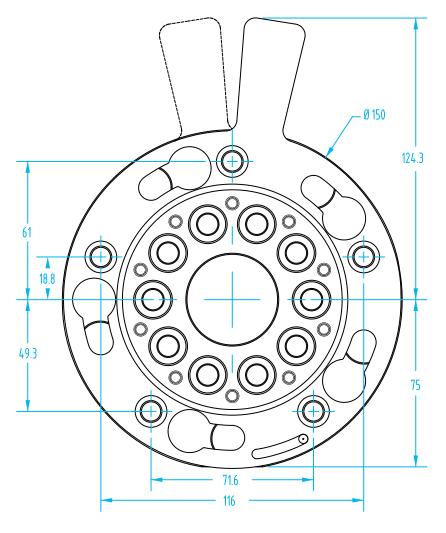


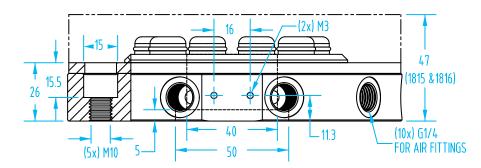
(Dimensioned drawing reduced to fit)

Large EOAT Quick Changer

Quick#	Part#	Description	Price
1815	GSQ-LR	Robot-Side - Large size (150mm)	\$795.00
1816	GSQ-LG	EOAT-Side - Large size (150mm)	\$430.00
502	WGS-QLEKRD	Robot-Side Electrical Connector & Cable	\$81.00
503	WGS-QLEKGD	EOAT-Side Electrical Connector & Cable	\$81.00
504	WGS-QLEKD	Spacer for Electrical Connectors	\$9.50
6546	QC150-H	Horizontal EOAT Storage Hanger (pg. 60)	\$38.27
5998	QC150-V	Vertical EOAT Storage Hanger (pg. 60)	\$38.27
1793	GSQ-CP-QC150	Quick Changer Centering Pin (pg. 37)	\$28.00

Additional Electrical Connectors available on page 30.







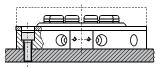
#1815 - Large Robot-Side Quick Changer



Electrical connectors mount to quick changer

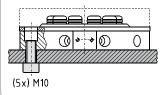
Robot-Side Mounting Options

You can use the holes in the quick changer as 8.5mm thru holes. Tap M8 threaded holes in your robot tooling plate.



(5x) M8

To use the threaded M10 holes in the quick changer, use 10.5mm thru holes in your robot tooling plate.



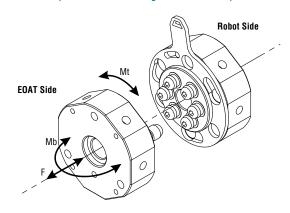


Small Size (50mm) >ASS< Quick Changers

NEW #3816 - Small EOAT-Side Quick Changer

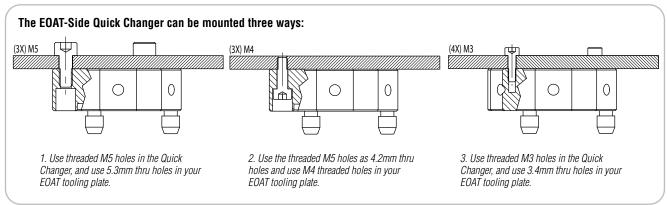
- For EOATs that are typically mounted on sprue pickers, tabletop SCARA robots, cobots, or used on IMMs sized up to 100 tons.
- This will generally handle EOATs weighing up to 11 lbs.
- Please consult with EOAT engineering for proper sizing to your application needs.
- Need to add more air circuits? Pneumatic Interface Expansion Modules available online, Quick #3933, #3934.

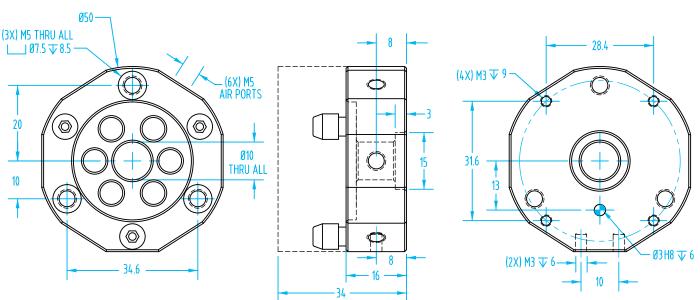
(Dimensioned drawing shown full scale)



Specificat	ions for Small	Size Quick Changer
Maight	Robot-Side	68g
Weight	EOAT-Side	95g
Maximum Air Pressure		6 bar (87psi)
Air Ports		(6X) M5
Electrical Connector		Optional - Adapter needed
Safety Loads:		
F 33 lbs.	Mt 14 ft-	lbs. Mb 7 ft-lbs.

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







Small Size (50mm) >ASS< Quick Changers

(Dimensioned drawing shown full scale)

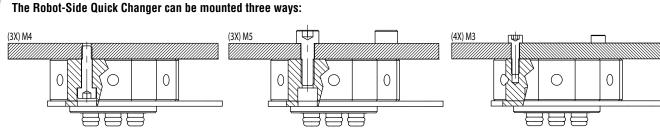
Small Size Quick Changers

Quick#	Part#	>ASS< #	Description	Price
3815	SWH-RV-50	1-020-05-00	Robot-Side - Small size (50mm)	\$273.00
3816	SWH-G-50	1-021-05-00	EOAT-Side - Small size (50mm)	\$103.95
502	WGS-QLEKRD	Robot-Side Electrical Connector & Cable		\$81.00
503	WGS-QLEKGD	EOAT-Side Electrical Connector & Cable		\$81.00
3945	GHV-SWH-G-50	1-022-05-00	EOAT Storage Hanger (pg. 61)	\$19.43
3836	SWH-DS-50	1-025-05-00	Spacer for Electrical Connectors	\$22.58

Additional Electrical Connectors available on page 30.

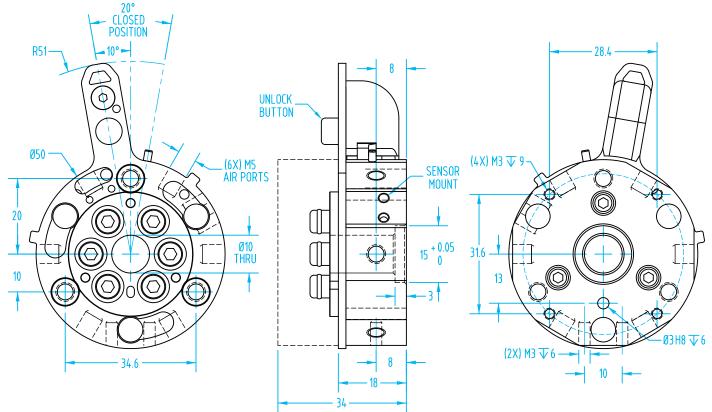
This quick changer features a safety locking mechanism against unintentional opening. The brass button needs to be pushed-in in order to unlock the quick changer. A sensor bracket is included, sensor sold separately.





1. Use threaded M5 holes in the Quick Changer, and use 5.3mm thru holes in your robot tooling plate. 2. Use the threaded M5 holes as 4.2mm thru holes. Tap M4 threaded holes in your robot tooling plate.

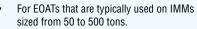
3. Use threaded M3 holes in the Quick Changer, and use 3.4mm thru holes in your robot tooling plate.



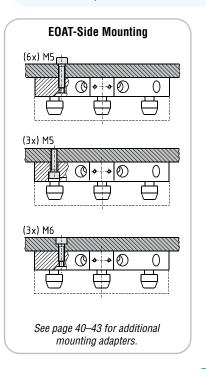


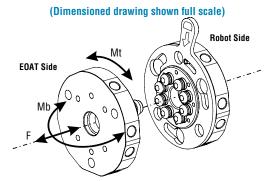
Standard Size (90mm) >ASS< Quick Changers





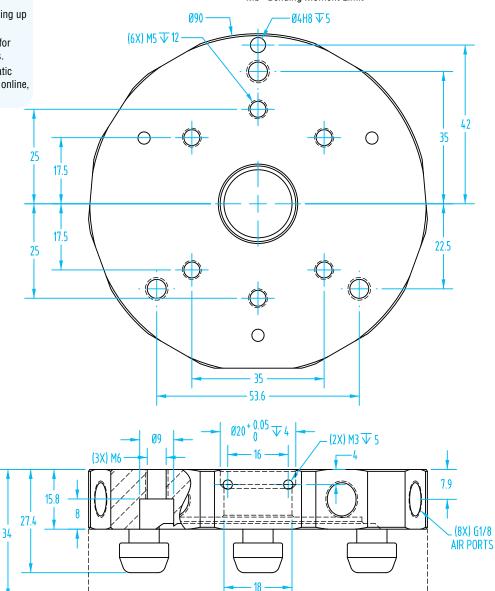
- This will generally handle EOATs weighing up to 44 lbs.
- Please consult with EOAT engineering for proper sizing to your application needs.
- Need to add more air circuits? Pneumatic Interface Expansion Modules available online, Quick #3933, #3934.





Specifications for Standard Size Q.C.			
147.1.1.1	Robot-Side	325g	
Weight	EOAT-Side	212g	
Maximum Air Pressure		6 bar (87psi)	
Air Ports		(8X) G 1/8"	
Electrical Connector		Optional	
Safety Loads:			
F 90 lbs.	Mt 73 ft-lbs.	Mb 44 ft-lbs.	

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





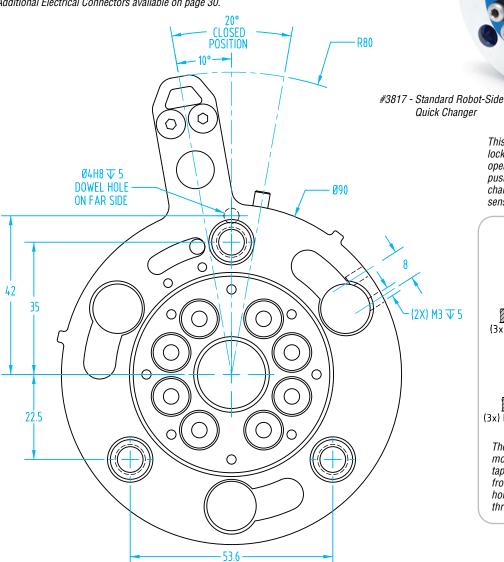
Standard Size (90mm) >ASS< Quick Changers

(Dimensioned drawing shown full scale)

Standard Size Quick Changers

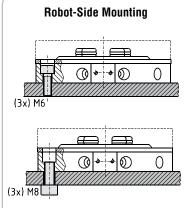
Quick#	Part#	>ASS< #	Description	Price
3817	SWH-RV-90	1-020-07-00	Robot-Side - Standard size (90mm)	\$347.50
3818	SWH-G-90	1-021-09-00	EOAT-Side - Standard size (90mm)	\$194.25
502	WGS-QLEKRD	Robot-Side Electrical Connector & Cable		\$81.00
503	WGS-QLEKGD	EOAT-Side Electrical Connector & Cable		\$81.00
3946	GHV-SWH-G-90	1-022-09-00	EOAT Storage Hanger (pg. 61)	\$30.98
3886	RHZ-SWH-R-90	1-026-09-00	Quick Changer Centering Pin	\$22.05

Additional Electrical Connectors available on page 30.

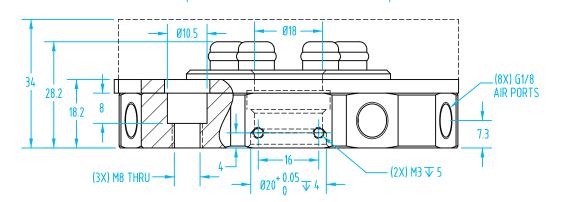


This quick changer features a safety locking mechanism against unintentional opening. The brass button needs to be pushed-in in order to unlock the quick changer. A sensor bracket is included, sensor sold separately.

NEW



The robot-side quick changer can be mounted two ways: Use M6 when tapping into your robot plate from the front. Use M8 when making a thru hole in your robot plate to use the M8 threads in the quick changer.

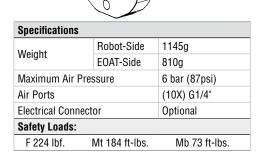




Robot Side

Large Size (150mm) >ASS< Quick Changers



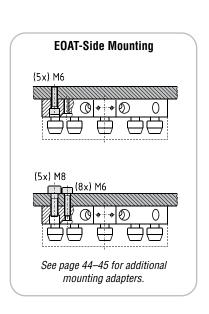


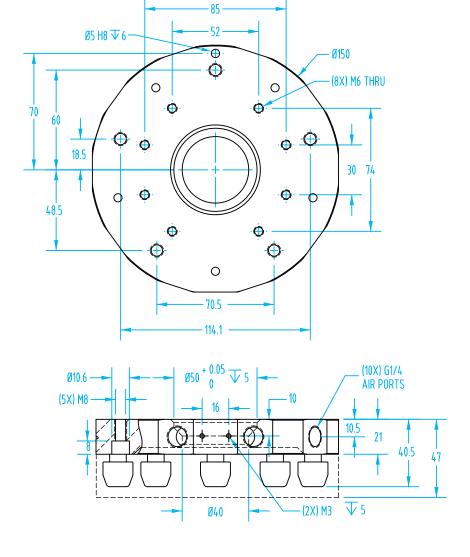
(Dimensioned drawing reduced to fit)

EOAT Side

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

- For EOATs that are typically used on IMMs sized from 500 to 2000 tons.
- This will generally handle EOATs weighing up to 88 lbs.
- Please consult with EOAT engineering for proper sizing to your application needs.
- Need to add more air circuits? Pneumatic Interface Expansion Modules available online, Quick #3933, #3934.







Large Size (150mm) >ASS< Quick Changers

(Dimensioned drawing reduced to fit)

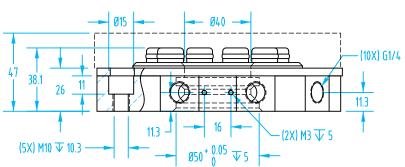
Large Size Quick Changers

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Quick#	Part#	>ASS< #	Description	Price
3831	SWH-R-150	1-020-15-00	Robot-Side - Large size (150mm)	\$530.25
3832	SWH-G-150	1-021-15-00	EOAT-Side - Large size (150mm)	\$301.35
502	WGS-QLEKRD	Robot-Side Elec	trical Connector & Cable	\$81.00
503	WGS-QLEKGD	EOAT-Side Elect	EOAT-Side Electrical Connector & Cable	
3837	SWH-DS-150	1-025-15-00	Spacer for Electrical Connectors	\$22.58
6546	QC150-H	Horizontal EOAT Storage Hanger (pg. 60)		\$38.27
5998	QC150-V	Vertical EOAT Storage Hanger (pg. 60)		\$38.27
3887	RHZ-SWH-R-150	1-026-15-00	Quick Changer Centering Pin	\$25.20

The SWH-150.. needs an adapter (Quick# 3837) for electrical connectors. Additional Electrical Connectors available on page 30.



#3831 - Large Robot-Side 18° Quick Changer **OPEN POSITION** R120 Ø5 H8 ▼ 6 Ø150 70 (\circ) 0 0 18.9 (2X) M3 √ 6 49.4 \bigcirc 71.7 116 015 Ø40



Robot-Side Mounting You can use the holes in the quick changer as 8.5mm thru holes. Tap M8 threaded holes in your robot tooling plate. (5x) M8 To use the threaded M10 holes in the quick changer, use 10.5mm thru holes in your robot tooling plate.

(5x) M10



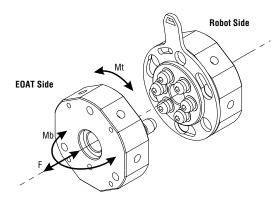
Small Size (50mm) Gimatic Quick Changers



#6423 - Small EOAT-Side Quick Changer

- For EOATs that are typically mounted on sprue pickers, tabletop SCARA robots, cobots, or used on IMMs sized up to 100 tons.
- This will generally handle EOATs weighing up to 11 lbs.
- Please consult with EOAT engineering for proper sizing to your application needs.

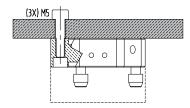
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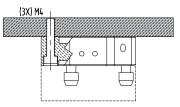
Specifications for Small Size Quick Changer		
147. 1. 1. 1	Robot-Side	65g
Weight	EOAT-Side	103g
Maximum Air Pressure		6 bar (87psi)
Air Ports		(4X) M5
Electrical Connector		Optional - Adapter needed
Safety Loads:		
F 78 lbf.	Mt 22 ft-I	os. Mb 11 ft-lbs.

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

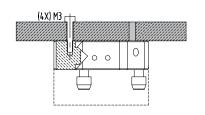
The EOAT-Side Quick Changer can be mounted three ways:



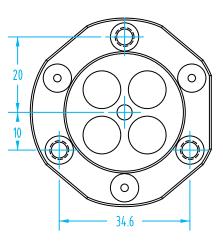
1. Use threaded M5 holes in the Quick Changer, and use 5.3mm thru holes in your EOAT tooling plate.

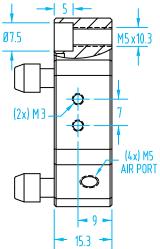


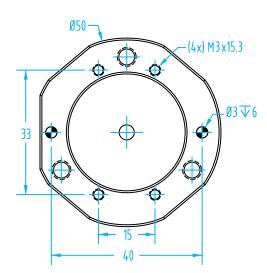
2. Use the threaded M5 holes as 4.2mm thru holes and use M4 threaded holes in your EOAT tooling plate.



3. Use threaded M3 holes in the Quick Changer, and use 3.4mm thru holes in your EOAT tooling plate.









Small Size (50mm) Gimatic Quick Changers

(Dimensioned drawing shown full scale)

Small Size Quick Changers

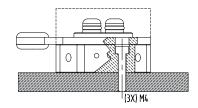
Quick#	Part#	Description	Price
6422	QC50-A	Robot-Side - Small size (50mm)	\$207.00
6423	QC50-B	EOAT-Side - Small size (50mm)	\$103.00
5039	CAQC	Robot-Side Electrical Connector	\$82.00
5040	CBQC	EOAT-Side Electrical Connector	\$46.00
6743	QC50-K	Electrical Connector Adapter for Small Size QC's	\$16.64
6070	CEQC-A	Robot-Side Cable for Electrical Connectors	\$21.84
6071	CEQC-B	EOAT-Side Cable for Electrical Connectors	\$21.84
6069	QC50-H	Horizontal EOAT Storage Hanger (pg. 58)	\$20.75
5996	QC50-V	Vertical EOAT Storage Hanger (pg. 58)	\$20.75

Note: The small size quick changer needs an adapter (Quick# 6743) for electrical connectors. See page 30 for more information.

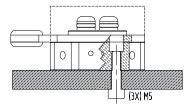


#6422 - Small Robot-Side Quick Changer

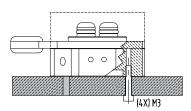
The Robot-Side Quick Changer can be mounted three ways:



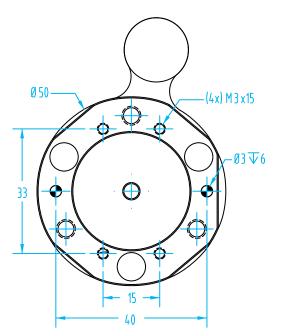
1. Use threaded M5 holes in the Quick Changer, and use 5.3mm thru holes in your robot tooling plate

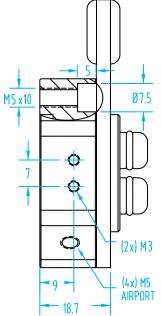


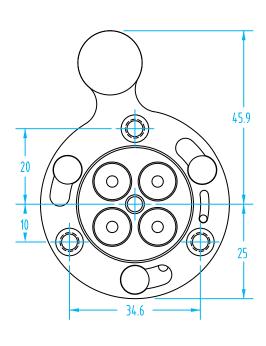
2. Use the threaded M5 holes as 4.2mm thru holes. Tap M4 threaded holes in your robot tooling plate.



3. Use threaded M3 holes in the Quick Changer, and use 3.4mm thru holes in your robot tooling plate.









Standard Size (90mm) Gimatic Quick Changers

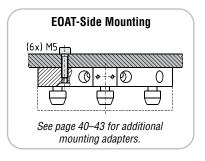


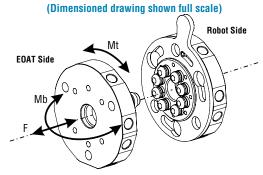


- This will generally handle EOATs weighing up to 44 lbs.
- Please consult with EOAT engineering for proper sizing to your application needs.
- Need to add more air circuits? Pneumatic Interface Expansion Modules available online, Quick#7561 & #7562.



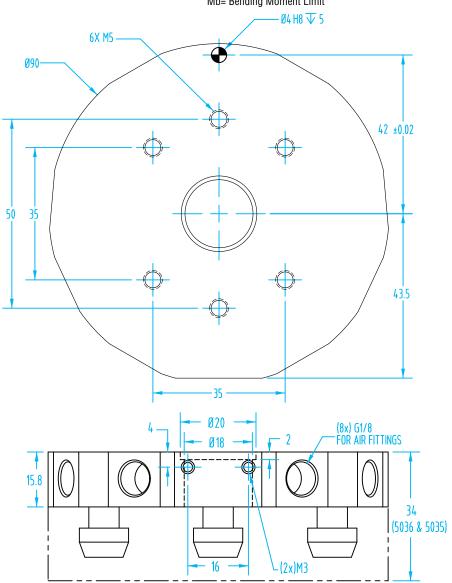
The set screw friction locks against the EOAT-Side's locking pins to eliminate any play between the two Quick Changer sides for "zero tolerance" applications. However, for standard applications, it is not required. The Quick Changer functions very well using only the main locking lever.





Specifications for Standard Size Quick Changer			
M/a:lad	Robot-Side	318g	
Weight	EOAT-Side	227g	
Maximum Air Pressure		6 bar (87psi)	
Air Ports		(8X) G 1/8"	
Electrical Connector		Optional	
Safety Loads:			
F 314 lbf.	Mt 132 ft-lbs.	Mb 73 ft-lbs.	

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





Standard Size (90mm) Gimatic Quick Changers

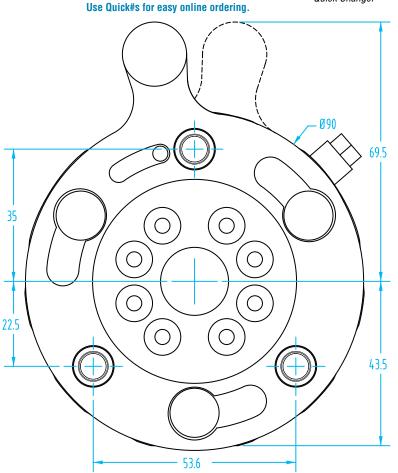
(Dimensioned drawing shown full scale)

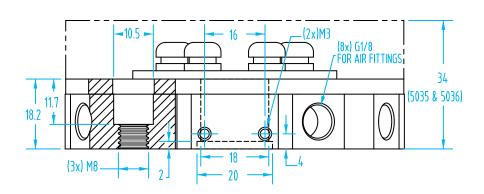
Standard Size Quick Changers

Quick#	Part#	Description	Price
5035	QC90-A	Robot-Side - Standard size (90mm)	\$302.00
5036	QC90-B	EOAT-Side - Standard size (90mm)	\$192.00
5039	CAQC	Robot-Side Electrical Connector	\$82.00
5040	CBQC	EOAT-Side Electrical Connector	\$46.00
6070	CEQC-A Robot-Side Cable for Electrical Connectors		\$21.84
6071	CEQC-B	EOAT-Side Cable for Electrical Connectors	\$21.84
6545	QC90-H	Horizontal EOAT Storage Hanger (pg. 59)	\$32.86
5997	QC90-V	Vertical EOAT Storage Hanger (pg. 59)	\$32.86
7380	QC9065	Quick Changer Centering Pin	\$25.00

Additional Electrical Connectors available on page 30.

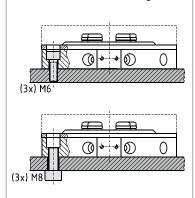
#5035 - Standard Robot-Side Quick Changer







Robot-Side Mounting



The Robot-Side Quick Changer can be mounted two ways: Use M6 when tapping into your robot plate from the front. Use M8 when making a thru hole in your robot plate to use the M8 threads in the Quick Changer.

Electrical connectors mount to Quick Changer





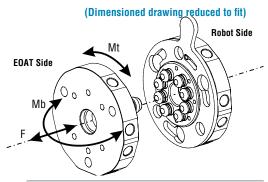
Quick Changer for Collaborative Robots QC75, see page 114.



Large Size (150mm) EOAT Quick Changer



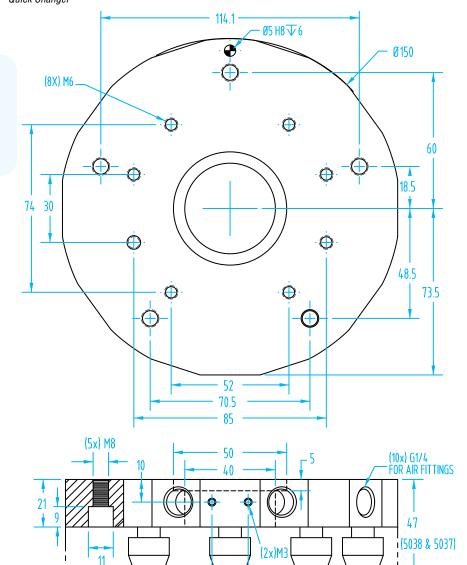
#5038 - Large EOAT-Side Quick Changer

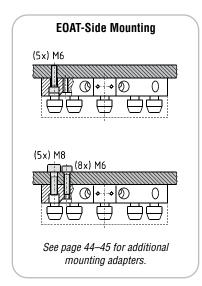


Specifications for Large Size Quick Changer			
Woight	Robot-Side	1123g	
Weight	EOAT-Side	827g	
Maximum Air Pressure		6 bar (87psi)	
Air Ports		(10X) G1/4"	
Electrical Connector		Optional	
Safety Loads:			
F 674 lbf. Mt 442 ft-lbs.		Mb 258 ft-lbs.	

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

- For EOATs that are typically used on IMMs sized from 500 to 2000 tons.
- This will generally handle EOATs weighing up to 110 lbs.
- Please consult with EOAT engineering for proper sizing to your application needs.





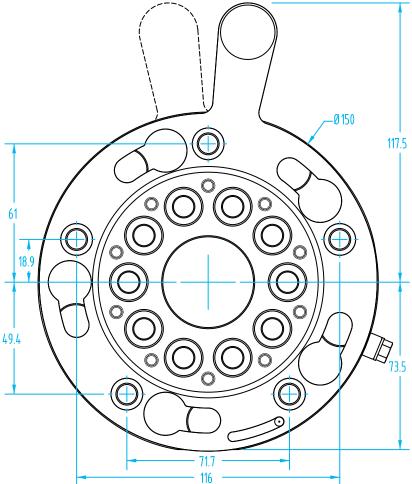


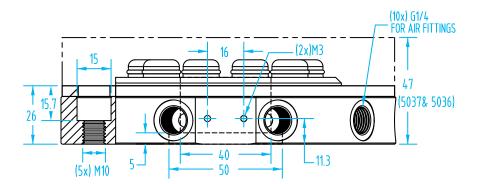
(Dimensioned drawing reduced to fit)

Large Quick Changers

Quick#	Part#	Description	Price
5037	QC150-A	Robot-Side - Large size (150mm)	\$515.00
5038	QC150-B	EOAT-Side - Large size (150mm)	\$296.00
5039	CAQC	Robot-Side Electrical Connector	\$82.00
5040	CBQC	EOAT-Side Electrical Connector	\$46.00
6070	CEQC-A	Robot-Side Cable for Electrical Connectors	\$21.84
6071	CEQC-B	EOAT-Side Cable for Electrical Connectors	\$21.84
6546	QC150-H	Horizontal EOAT Storage Hanger (pg. 60)	\$38.27
5998	QC150-V	Vertical EOAT Storage Hanger (pg. 60)	\$38.27
7381	QC150100	Quick Changer Centering Pin	\$60.00

QC-160 with 12-ports available, Call EMI or shop online. Additional Electrical Connectors available on page 30.





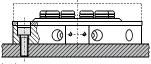




Detachment of the two parts is quick and easy.

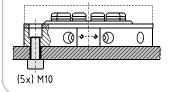
Robot-Side Mounting

You can use the holes in the Quick Changer as 8.5mm thru holes. Tap M8 threaded holes in your robot tooling plate.



(5x) M8

To use the threaded M10 holes in the quick changer, use 10.5mm thru holes in your robot tooling plate.

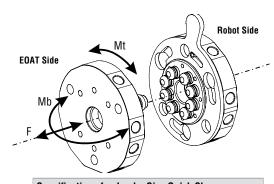




70

Jumbo Size (200mm) EOAT Quick Changer



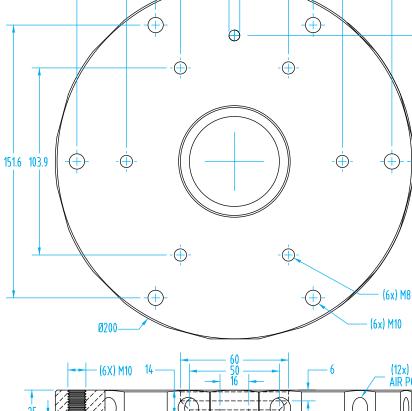


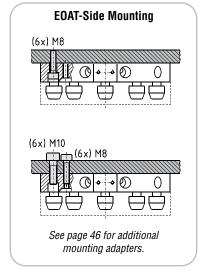
Specifications for	iick Changer	
Waight	Robot-Side	2640g
Weight	EOAT-Side	1890g
Maximum Air Pressure		6 bar (87psi)
Air Ports		(12X) G1/4"
Electrical Connect	or	Optional
Safety Loads:		
F 2023 lbf. Mt 1475 ft-lbs.		Mb 995 ft-lbs.

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

175 120 87.5

- For EOATs that are typically used on IMMs sized 1000 to 3000 tons.
- This will generally handle EOATs weighing up to 330 lbs.
- Please consult with EOAT engineering for proper sizing to your application needs.







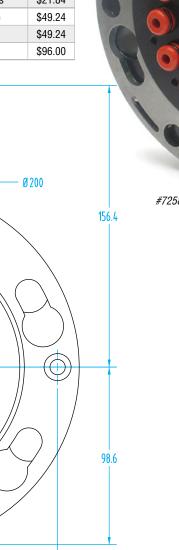
151.6

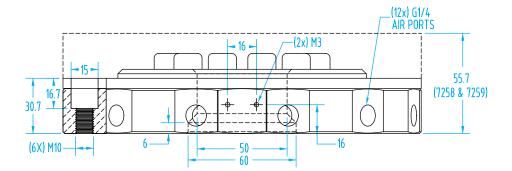
Jumbo Size (200mm) EOAT Quick Changer

Jumbo Quick Changers

Quick#	Part#	Description	Price
7258	QC200-A	Robot-Side - Jumbo size (200mm)	\$608.00
7259	QC200-B	EOAT-Side - Jumbo size (200mm)	\$342.00
5039	CAQC	Robot-Side Electrical Connector	\$82.00
5040	CBQC	EOAT-Side Electrical Connector	\$46.00
6070	CEQC-A	Robot-Side Cable for Electrical Connectors	\$21.84
6071	CEQC-B	EOAT-Side Cable for Electrical Connectors	\$21.84
6076	QC200-H	Horizontal EOAT Storage Hanger (pg. 61)	\$49.24
5999	QC200-V	Vertical EOAT Storage Hanger (pg. 61)	\$49.24
7382	QC200120	Quick Changer Centering Pin	\$96.00

Additional Electrical Connectors available on page 30.





87.5

175

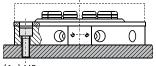




Detachment of the two parts is quick and easy.

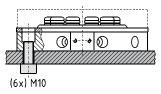
Robot-Side Mounting

You can use the holes in the quick changer as 8.5mm thru holes. Tap M8 threaded holes in your robot tooling plate.



(6x) M8

To use the threaded M10 holes in the Quick Changer, use 10.5mm thru holes in your robot tooling plate.





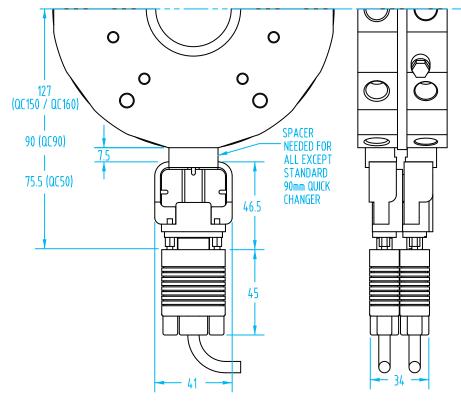
Electrical Connectors



Spacer for Senvex QC 150 and Gimatic QC's 150, 160, and 200 (included). Spacer for Size 50 sold separately.

(Dimensioned drawing reduced to fit)

- Uses standard 15-pin D-sub cables, sold separately on page 32.
- Suitable for use with >ASS<, Senvex / WGS, & Gimatic Quick Changers.
- Excellent electrical contact between male and female connectors.
- Spacer for Senvex and >ASS< QC 150 and Gimatic QC's 150, 160, and 200 is included. Spacers for Small Size 50 QC's sold separately on page 31.
- Dimensional drawings for #7607/#7608 & #7456/#7457 can be found online: www.EMIcorp.com & search by Quick #.



Electrical Connectors

Part#	CAQC	CBQC	MAQC	МВОС	PAQC	PBQC	PMAQC	PMBQC
Quick#	5039	5040	5060	5059	7607	7608	7456	7457
Price	\$82.00	\$46.00	\$79.00	\$40.00	\$73.17	\$73.17	\$79.00	\$79.00
Weight	30g	30g	30g	30g	50g	50g	50g	50g
Contact	Gold	plated	Gold plated sp	oring contacts	Gold	plated	Gold plated sp	oring contacts
Description	Robot-Side	EOAT-Side	Robot-Side	EOAT-Side	Robot-Side	EOAT-Side	Robot-Side	EOAT-Side
I/O connection type			15-pin D	-sub, high dens	nsity elbow type, VGA type			
Maximum contact resistance				30 mΩ @	100 mA DC			
Minimum insulation resistance				500 MΩ @	9 500 V DC			
Working current				3	Α			
Break down voltage	1000 V AC (1 minute)							
Operating temperature				0°-2	200°F			



Electrical Connectors

Note: While you can use any of these electrical connectors as well as the connectors on page 33 with the round Quick Changers listed in this catalog, you must order the same style EOAT & Robot side connectors for a proper operation.







90° Electrical Connector with Spring Contacts

NEW

#7457
(EOAT-Side)

These 90° electrical connectors are not compatible with the WGS / Senvex electrical connectors on page 33.

MAQC / MBQC & PMAQC / PMBQC: Spring contact design helps avoid damage to contacts. The spring assists in maintaining connection through constant compression and pin geometry. This provides simpler and easier coupling through self-aligning geometry.

· Spacers include mounting hardware.



Gimatic Spacer for Electrical Connectors

Quick#	Part#	Required for:	Price
6743	QC50-K	Small Size (50mm)	\$16.64



>ASS< Spacer for Electrical Connectors

Quick#	Part#	>ASS< #	Required for:	Price
3836	SWH-DS-50	1-025-05-00	Small Size (50mm)	\$22.58



Electrical Connection Cables and Cable Connectors

Connectors



Extra Strength Double Housing (Aluminum)

Quick#	Part#	Description	Price
5345	CAQC-Double	Robot-Side (#5039 & #5060)	\$67.60
5346	CBQC-Double	EOAT-Side (#5040 & 5059)	\$67.60





Extra Strength Single Housing (Aluminum)

Quick#	Part#	Description	Price
5343	CAQC-Strong	Robot-Side (#5039 & #5060)	\$35.36
5344	CBQC-Strong	EOAT-Side (#5040 & 5059)	\$35.36

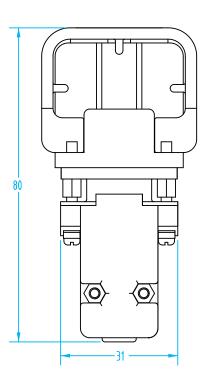
(Dimensioned drawings shown full scale)

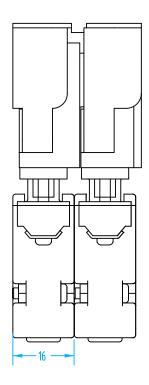


Cabling Connectors (15-pin D-SUB - VGA Type)

Quick#	Part#	Description	Price
5014	CEQC-AC	Robot-Side	\$7.88
5015	CEQC-BC	EOAT-Side	\$7.88







These cabling connectors require you to solder the cable wires to the connector. (Cable not included.)



Electrical Connection Cables (1.5 meter each)

Quick#	Part#	Description	Price
6070	CEQC-A	Robot-Side	\$21.84
6071	CEQC-B	EOAT-Side	\$21.84



>ASS< & WGS / Senvex Electrical Connectors

(Dimensioned drawings shown full scale)

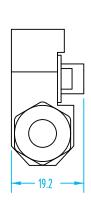
- Suitable for use with >ASS<, Senvex / WGS, & Gimatic Quick Changers. (see note on page 31.)
- Certain Quick Changer sizes require spacers for the electrical connectors, listed below.
- Each supplied with 500mm long cable.

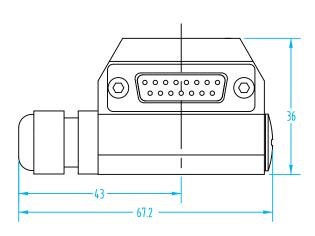
Low-Profile Electrical Connectors

Quick#	Part#	Price	
502	WGS-QLEKRD	Robot-Side	\$81.00
503	WGS-QLEKGD	EOAT-Side	\$81.00

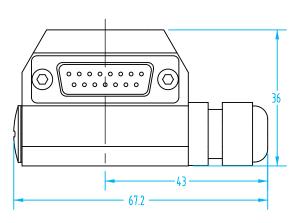
These low-profile 90° electrical connectors are not compatible with the Gimatic electrical connectors on page 30-31.











All spacers include mounting hardware.





#504



Senvex Spacer for Electrical Connectors

Quick#	Part#	Required for:	Price
504	WGS-QLEKD	Large Size (150mm)	\$9.50

>ASS< Spacer for Electrical Connectors

Quick#	Part#	>ASS< #	Required for:	Price
3836	SWH-DS-50	1-025-05-00	Small Size (50mm)	\$22.58
3837	SWH-DS-150	1-025-15-00	Large Size (150mm)	\$22.58

Gimatic Spacer for Electrical Connectors

Quick#	Part#	Required for:	Price
6743	QC50-K	Small Size (50mm)	\$16.64



Lock Unit for Gimatic Quick Changers

- Lock unit works with Gimatic: QC90-A, QC150-A, QC160-A, QC200-A, QCX90-A, QCX150-A, QCX160-A, QCX200-A.
- Prevents accidental unlocking or disengagement of the QC.
- Sensor Ready, see page 1002 for sensors.

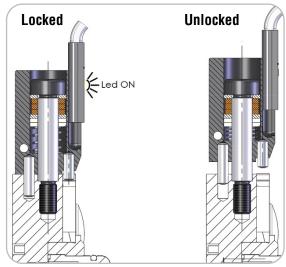




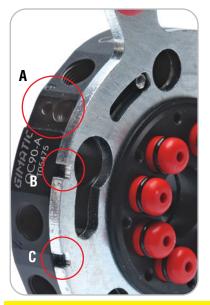
Mechanical safety: It locks the handle of the quick changer, only when correctly engaged.

Lock Unit for Gimatic Quick Changers

Quick#	Part#	Weight	Price	
5013	LOQC	20g	\$51.31	



Electrical safety: It emits an electric signal, only when locked. This signal will give the consent to the movement of the robot. In the case of incorrect engagement, or destructive impact on the LOQC, or electrical fault of the sensor, the signal drops out and the robot stops.



Lock unit ONLY works with newer model Gimatic Quick Changers that have a threaded hole (A), and grooves (B & C).





Sensor Bracket for >ASS< Quick Changer

- Sensor bracket mounts on the Robot or EOAT-Side of Quick Changer.
- Sensor signals when QC lock is engaged.
- · Does not provide mechanical locking.



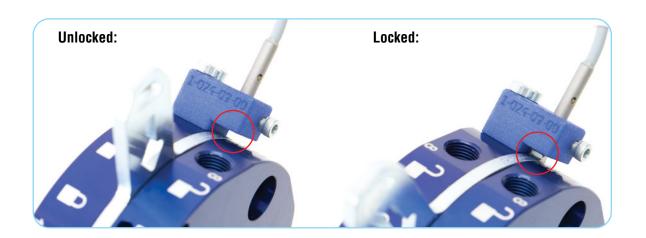
Sensor Bracket for >ASS< Quick Changers



Quick#	Part#	>ASS< #	Description	Price
3843	SWH-SH-G-50	1-024-05-00	for Small Size QC (50mm)	\$25.20
3844	SWH-SH-G-90150	1-024-09-00	for Standard & Large Size QC's (90mm & 150mm)	\$25.20

Inductive Sensors

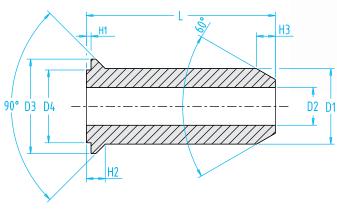
Quick#	Part#	Description	Price
2429	GSG-IS-NPN	NPN Ø4mm N.O. Inductive Sensor, 2m long	\$62.00
2430	GSG-IS-PNP	PNP Ø4mm N.O. Inductive Sensor, 2m long	\$62.00





Gimatic Quick Changer Centering Pin

- Guides the manual centering of heavy EOATs.
- Made of aluminum
- To be positioned on the Robot-Side.
- Recommended Safety Loads can be found on online product pages, search by Quick#.
- Made for Gimatic Robot-Side Quick Changers.
- Gimatic, >ASS< and Senvex EOAT-Side Quick Changers will all fit properly over the pin during installation.

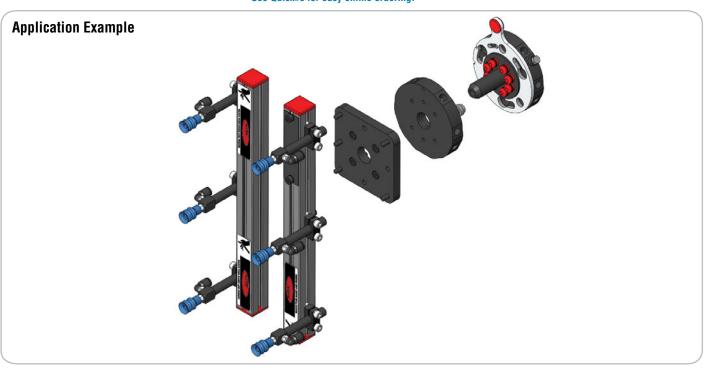




Gimatic Quick Changer Centering Pin

Quick#	Part#	Price	Quick Changer	L	H1	H2	Н3	ØD1	ØD2	ØD3	ØD4	Wt.
7380	QC9065	\$25.00	Standard QC90-A (90mm)	65	2	5	5	18	8	20	14	190g
7381	QC150100	\$60.00	Large QC150/160-A (150mm)	100	2.5	10	10	40	20	50	38.5	435g
7382	QC200120	\$96.00	Jumbo QC200-A (200mm)	120	3	11	15	50	25	60	43.5	950g

Use Quick#s for easy online ordering.







WGS / Senvex Quick Changer Centering Pin

- Guides the manual centering of heavy EOATs.
- Made of aluminum
- To be positioned on the Robot-Side.
- Recommended Safety Loads can be found on online product pages, search by Quick#.
- · Dimensional drawings found online.
- Made for WGS/Senvex Robot-Side Quick Changers.
- Gimatic, >ASS< and Senvex EOAT-Side Quick Changers will all fit properly over the pin during installation.

WGS / Senvex Quick Changer Centering Pin

Quick# Part# Pri		Price	Quick Changer	Diameter Ø	Wt.
1791	GSQ-CP-QC90	\$26.00	Standard GSQ-R (90mm)	20mm	34g
1793	GSQ-CP-QC150	\$28.00	Large GSQ-LR (150mm)	50mm	253g



>ASS< Quick Changer Centering Pin

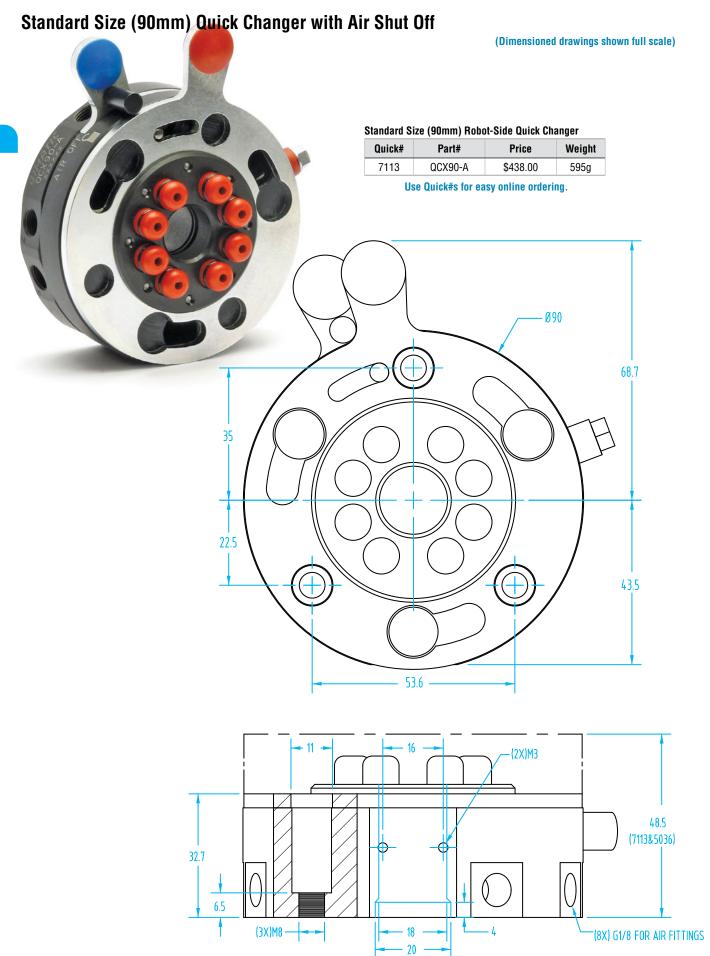
- Guides the manual centering of heavy EOATs.
- Made of aluminum
- To be positioned on the Robot-Side.
- Recommended Safety Loads can be found on online product pages, search by Quick#.
- · Dimensional drawings found online.
- Made for >ASS< Robot-Side Quick Changers.
- Gimatic, >ASS< and Senvex EOAT-Side Quick Changers will all fit properly over the pin during installation.

>ASS< Quick Changer Centering Pin



Quick#	ck# Part# >ASS<# Pr		Price	Quick Changer	Diameter Ø	Wt.
3886	RHZ-SWH-R-90	1-026-09-00	\$22.05	Standard SWH-R-90 (90mm)	20mm	37g
3887	RHZ-SWH-R-150	1-026-15-00	\$25.20	Large SWH-R-150 (150mm)	50mm	262g







Large Size (150mm) Quick Changer with Air Shut Off

(Dimensioned drawings reduced to fit)

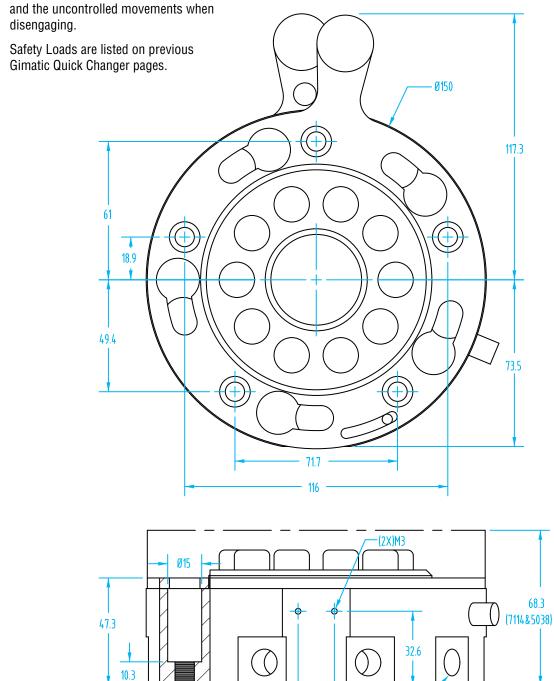
- The air valves automatically closes the air flow before the system is completely disengaged.
- It is not possible to open the air flow, if the flange is not engaged.

 The rotating tap valve solves all the problems of ball valve systems: the high pushing force necessary for engaging and the uncontrolled movements when disengaging. Large Size (150mm) Robot-Side Quick Changer

Quick# Part#		Price	Weight		
7114	QCX150-A	\$756.00	2200g		

See Also: EMIcorp.com

Quick#	Part#	Price	Weight
7311	QCX160-A	\$782.00	2200g
7312	QCX200-A	\$879.00	4900g



16

(5X)M10

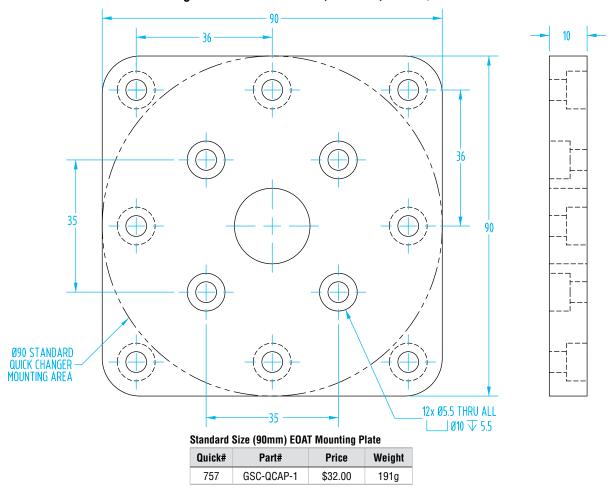
(10X) G1/4 FOR AIR FITTINGS

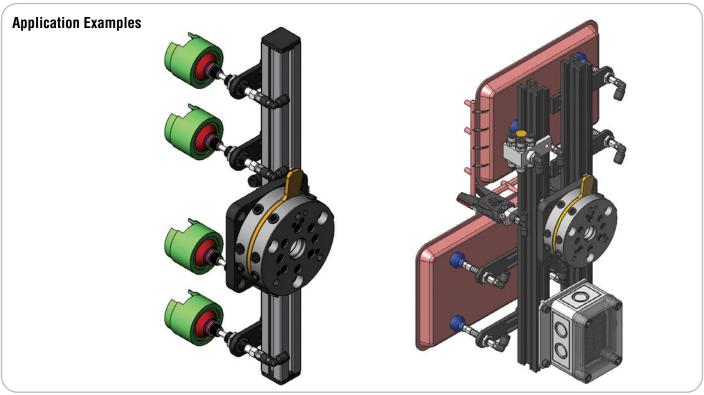


EOAT Mounting Plate for Standard Size (90mm) Quick Changers

(Dimensioned drawing shown full scale)

Use with 90mm Quick Changers to Mount to >ASS<, Gimatic, and 80/20 Profile







Blank EOAT Mounting Plate for Standard Size (90mm) Quick Changers

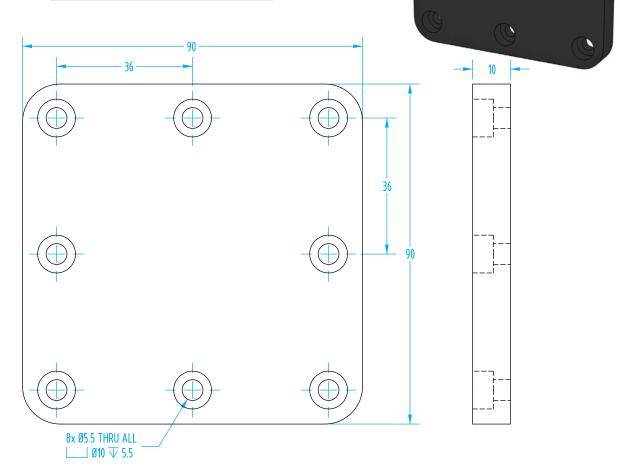
(Dimensioned drawing shown full scale)

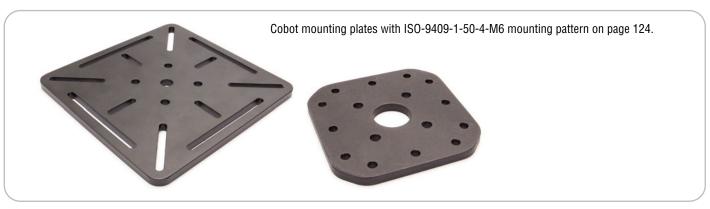
Basic Blank Mounting Plate for Custom Mount

This anodized aluminum plate can be used as a manual EOAT mounting plate to adapt profiles as shown on page 40. It is scored with a center line making it easy to locate holes for mounting to your robot tooling plate. There is plenty of space on this plate to drill or tap holes as necessary. Pre-drilled and counter-bored holes simplify mounting to profile.

Standard Size (90mm) EOAT Mounting Plate

Quick#	Part#	Price	Weight
753	GSC-QCAP-1B	\$35.86	205g







EOAT Mounting Plate for Standard Size (90mm) Quick Changers

(Dimensioned drawing shown full scale)

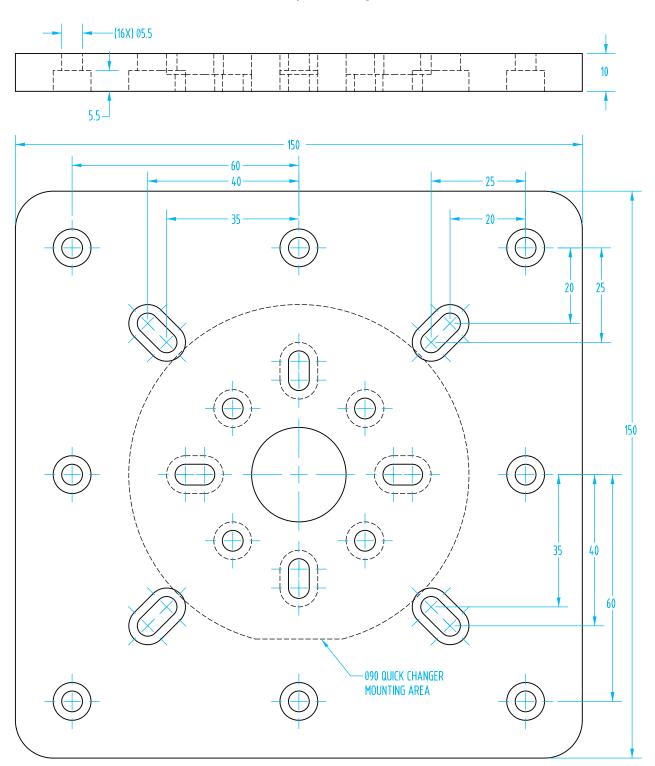
Use with 90mm Quick Changers to Mount to >ASS<, Gimatic, and 80/20 Profile

Standard Size (90mm) EOAT Mounting Plate

Quick#	Part#	Wt.	Price	Notes
1664	GSC-QCAP-2	553g	\$42.80	For >ASS<, Gimatic, and 80/20 profiles, use #972 M5x12 low head screws, #865 lock washers, and appropriate slotted nuts. Fasteners on page 1077.

Use M5x16mm SHCS to attach to quick changer

Use Quick#s for easy online ordering.





Blank EOAT Mounting Plate for Standard Size (90mm) Quick Changers

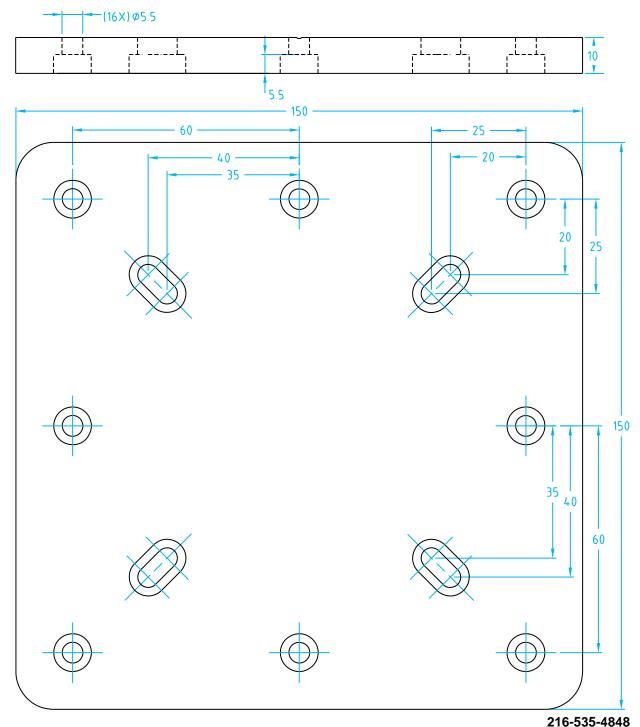
(Dimensioned drawing shown full scale)

Basic Blank Mounting Plate for Custom Mount

This anodized aluminum plate can be used as a manual EOAT mounting plate to adapt profiles as shown on page 42. It is scored with a center line making it easy to locate holes for mounting to your robot tooling plate. There is plenty of space on this plate to drill or tap holes as necessary. Pre-drilled and counter-bored holes simplify mounting to profile.

Standard Size (90mm) EOAT Mounting Plate

Quick#	Part#	Wt.	Price	Description
544	GSC-GMB-150	582g	\$42.80	For >ASS<, Gimatic and 80/20 profiles, use #972 M5x12 low-head screws, #865 lock washers, and appropriate slotted nuts. Fasteners on page 1077.



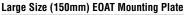


EOAT Mounting Plate for Large Size (150mm) Quick Changers

(Dimensioned drawing shown half scale)

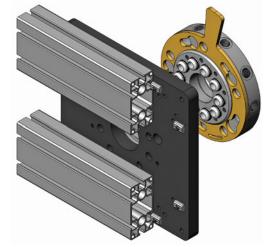
Use with 150mm Quick Changers to Mount to >ASS<, Gimatic, and 80/20 Profile

Typically used when the injection molding machine is over 750 tons, this plate is designed to mount large/jumbo >ASS<, Gimatic, and 80/20 four- and six-groove profiles (80mmx40mm) as well as all standard profile. It is pre-drilled to mount to the large EOAT quick changer. The counter-bored holes provide flush mounting surfaces on both sides. And it can also be used as a manual mounting plate to the robot.

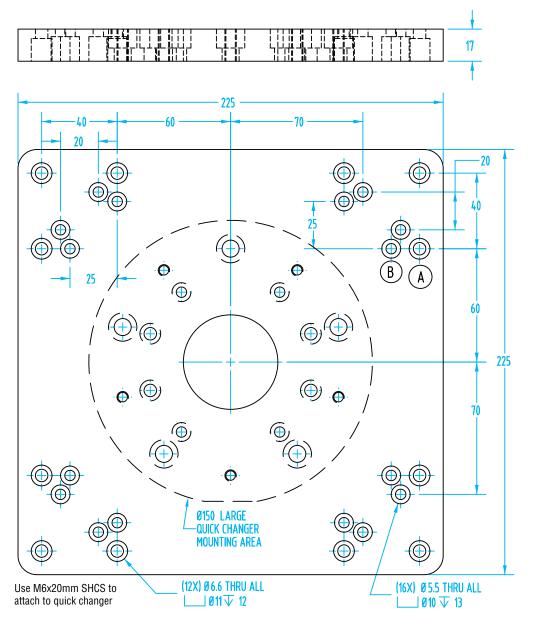


Quick#	Part#	Wt.	Price	Description
1817	GSC-QCAP-L	2094g	\$99.00	Fasteners on page 1077

Note: Can also be used with Gimatic QC-160



- (A) 40mm spacing for >ASS< 80mm X 40mm "J" profiles. Use: #874 M6 x 16mm SHCS, #880 lock washer, & #3031 M6 T nut.
- B 25mm spacing for >ASS< 50mm X 25mm "X" profiles and 80/20 1020 profiles. Use #854 M5 x 12mm SHCS, #865 lock washer, & #3030 M5 T nut.





Blank EOAT Mounting Plate for Large Size (150mm) Quick Changers

(Dimensioned drawing shown half scale)

Basic Blank Mounting Plate for Custom Mount

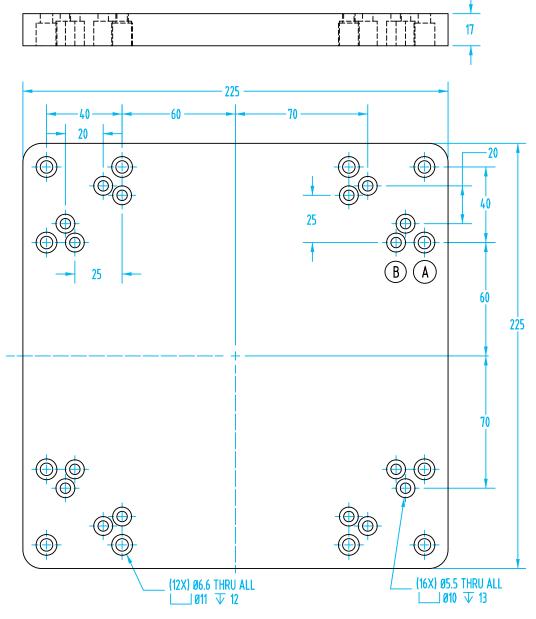
This anodized aluminum plate can be used as a manual EOAT mounting plate to adapt profiles as shown on page 44. It is scored with a center line making it easy to locate holes for mounting to your robot tooling plate. There is plenty of space on this plate to drill or tap holes as necessary. Pre-drilled and counter-bored holes simplify mounting of two-, four-, and six-groove profiles.

Save on Custom Plates!

Custom mounting plates, interfaces, and brackets for building EOAT are available from EMI – Fast and at a low cost.
EMI's in-house laser cutter precision cuts aluminum and stainless up to 0.250" thick.

- (A) 40mm spacing for >ASS< 80mm X 40mm "J" profiles. Use: #874 M6 x 16mm SHCS, #880 lock washer, & #3031 M6 T nut.
- B 25mm spacing for >ASS< 50mm X 25mm "X" profiles and 80/20 1020 profiles. Use #854 M5 x 12mm SHCS, #865 lock washer, & #3030 M5 T nut.







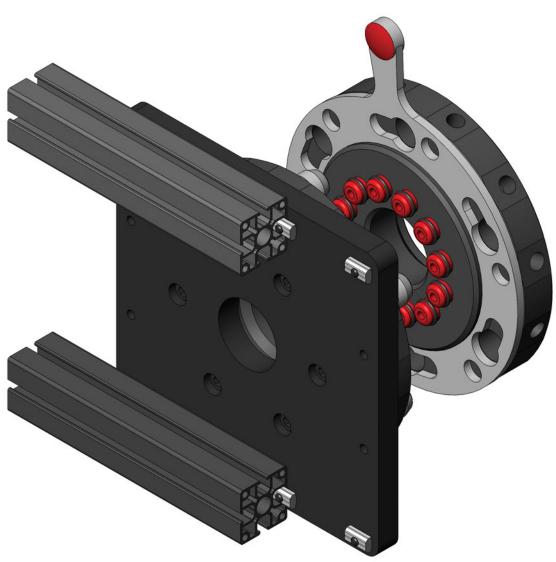
EOAT Mounting Plate for Jumbo Size (200mm) Quick Changers

Use with 200mm Jumbo Quick Changers to Mount to >ASS<, Gimatic, and 80/20 Profile



Jumbo EOAT Mounting Plate

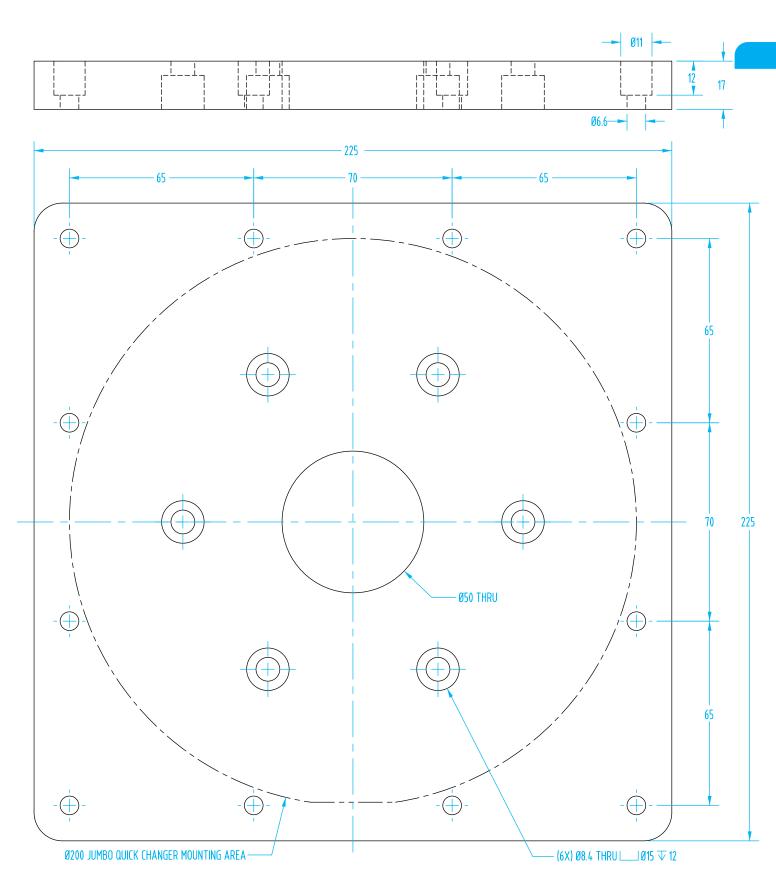
Quick#	Part#	Wt.	Price	Description
1141	GSC-GMB-225	2160g	\$99.00	Fasteners on page 1077





EOAT Mounting Plate for Jumbo Size (200mm) Quick Changers

(Dimensioned drawing shown half scale)





Gimatic Quick Changer Interface

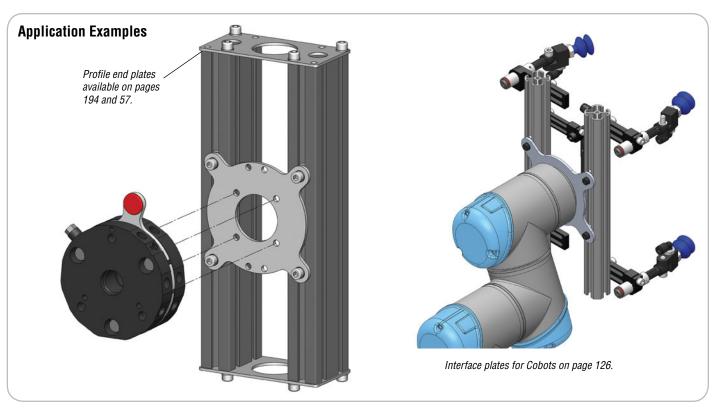


Thin plate-steel interface to mount EOAT-Side quick changer to Gimatic, >ASS<, and 80/20 profiles. Fasteners and mounting screws are included.

Quick Changer Interface

Quick#	Part#	Price	Quick Changer	Wt.
7303	MFI-A277	\$23.66	Mini 50mm (QC50)	90g
5836	MFI-A102	\$27.25	Standard 90mm (QC90)	190g
5837	MFI-A103	\$39.68	Large 150mm / 160mm (QC150 / QC160)	540g

Use Quick#s for easy online ordering.

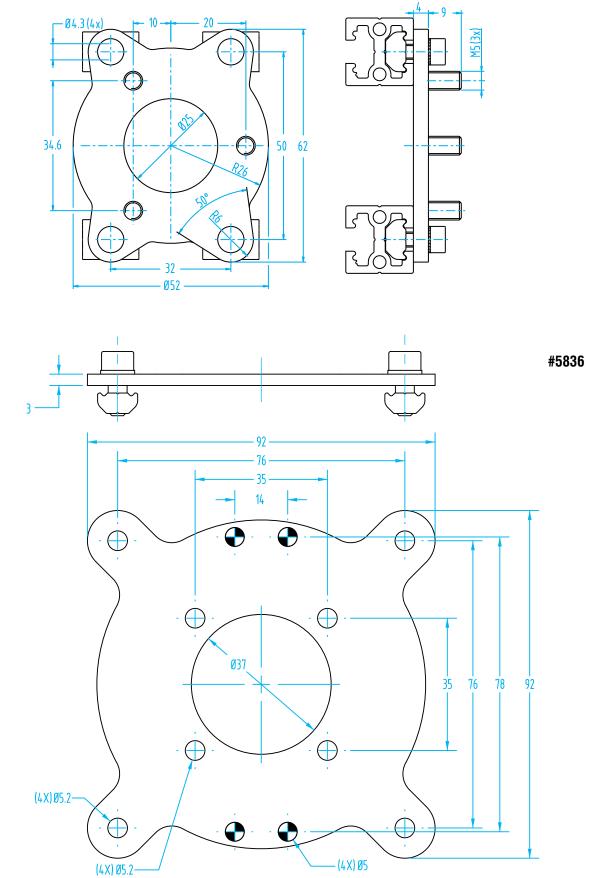




Gimatic Quick Changer Interface

(Dimensioned drawing shown full scale)

#7303





Gimatic Quick Changer Interface

Save on Custom Plates!

Custom mounting plates, interfaces, and brackets are available from EMI – Fast and at a low cost. EMI's in-house laser cutter precision cuts aluminum and stainless up to 0.250" thick.

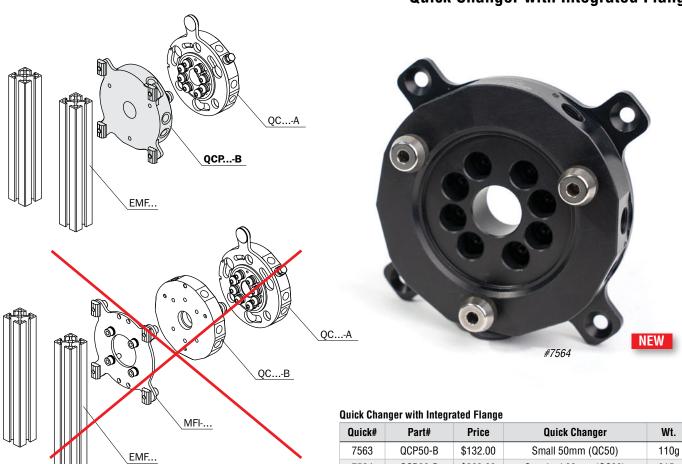
(8X)Ø5.2

(8X)Ø6.2

(4X)Ø5.2



Quick Changer with Integrated Flange



Includes mounting hardware

F

7564

7565

7566

7567

Ε

D

Quick#

Α

B C

QCP90-B

QCP150-B

QCP160-B

QCP200-B

G

Н

\$203.00

\$328.00

\$339.00

\$402.00

Standard 90mm (QC90)

Large 150mm (QC150)

Large Plus 160mm (QC160)

Jumbo 200mm (QC200)

L

М

K

315g

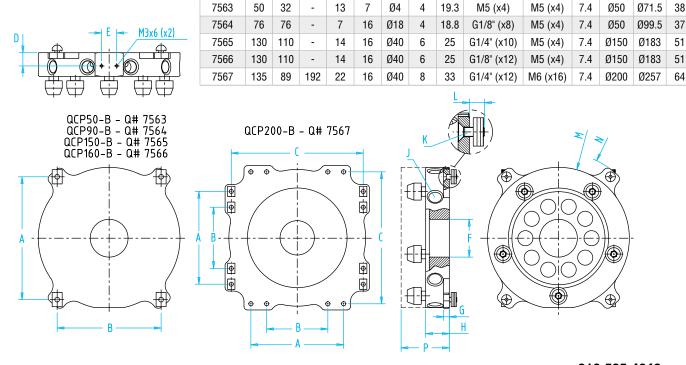
1090g

1150g

2400g

Р

N





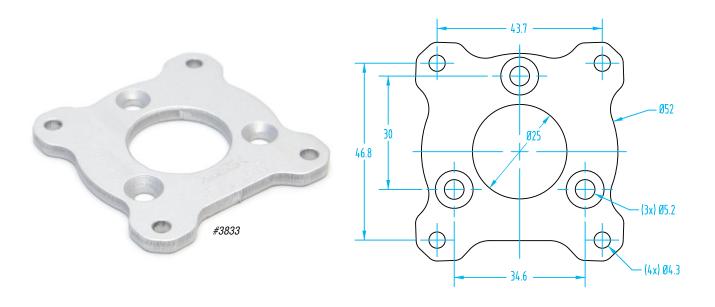
>ASS< Quick Changer Interfaces

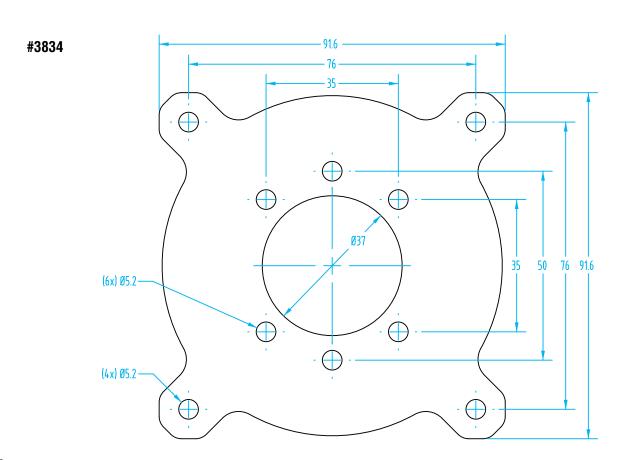
>ASS< Quick Changer Interface

NEW

Quick#	Part#	>ASS< #	Quick Changer	Price	Material	Thickness	Wt.
3833	GP-SWH-G-50	1-023-05-00	Mini (SWH-50)	\$22.05	Aluminum	4mm	54g
3834	GP-SWH-G-90	1-023-09-00	Standard (SWH-90)	\$25.73	Steel	3mm	180g
3835	GP-SWH-G-150	1-023-15-00	Large (SWH-150)	\$37.28	Steel	4mm	512g

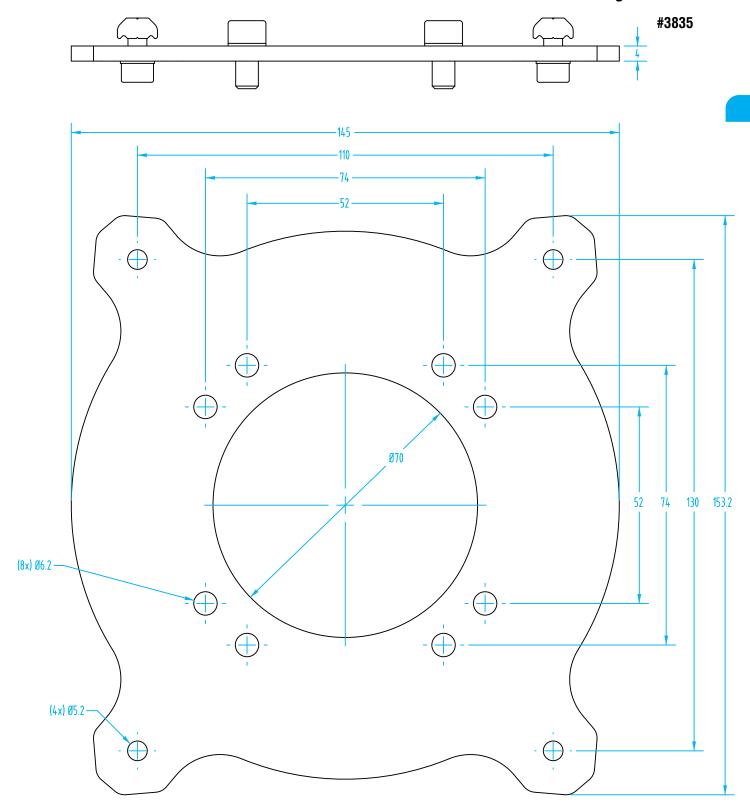
Includes fasteners and mounting hardware.







>ASS< Quick Changer Interfaces



Save on Custom Plates!

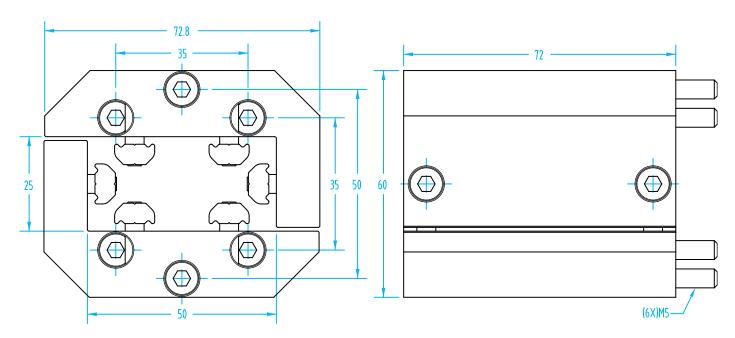
Custom mounting plates, interfaces, and brackets are available from EMI – Fast and at a low cost. EMI's in-house laser cutter precision cuts aluminum and stainless up to 0.250" thick.



(Dimensioned drawings shown full scale)

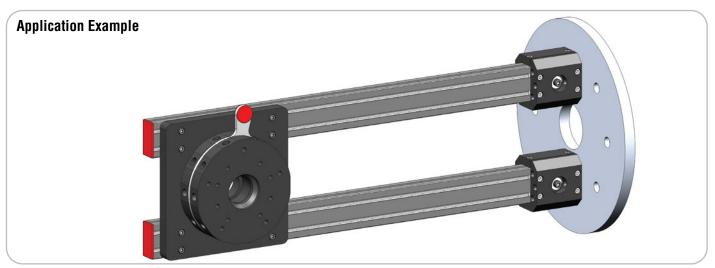
- Mounts directly to standard size QC90 Quick Changer and 50x25 profile.
- Pre-drilled thru hole for installation of bolt to pass through the profile and adaptor to act as a mechanical safety.
- Mounting hardware is included for QC90 and 50x25 profile.





For Standard Size Quick Changer

Quick#	Part#	Price	Description	Weight
6986	MFI-A254	\$182.00	6-axis adaptor for QC90 and 50x25 profile	680g

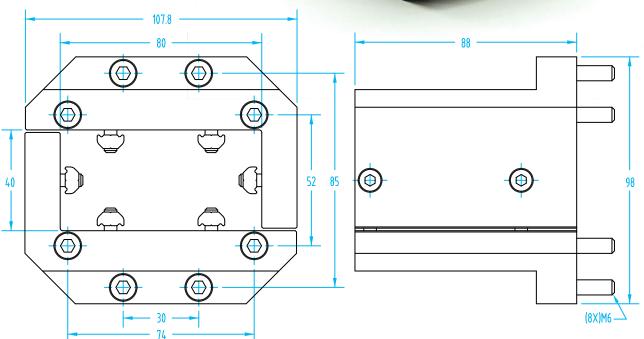




(Dimensioned drawings reduced to fit)

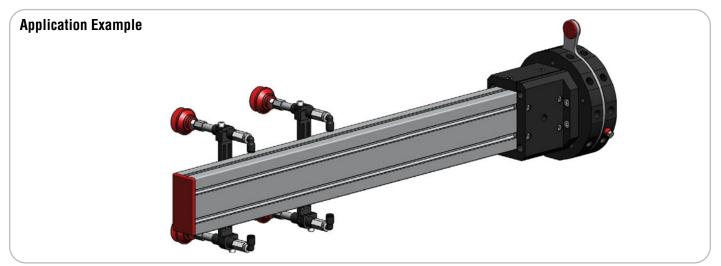
- Mounts directly to large size QC150 & QC160 Quick Changer and 80x40 profile.
- Pre-drilled thru hole for installation of bolt to pass through the profile and adaptor to act as a mechanical safety.
- Mounting hardware is included for QC150, QC160 and 80x40 profile.





For Large Size Quick Changer

Quick#	Part#	Price	Description	Weight
6987	MFI-A255	\$307.00	6-axis adaptor for QC150 / QC160 and 80x40 profile	1300g

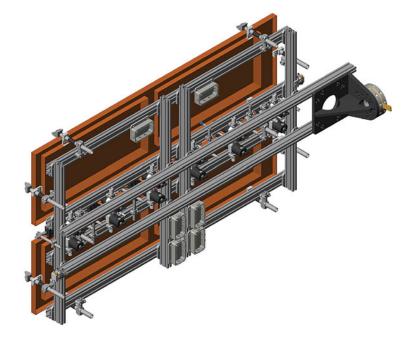




(Dimensioned drawings shown half scale)

Fastens to Quick Changer for easy Mounting of Gimatic, >ASS<, and 80/20 Profiles

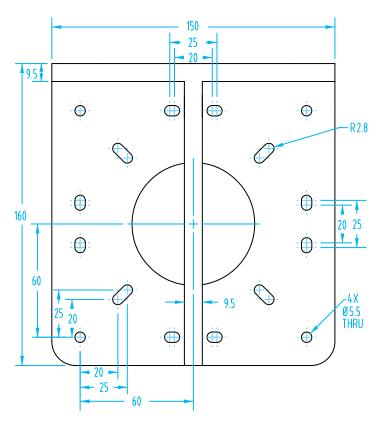


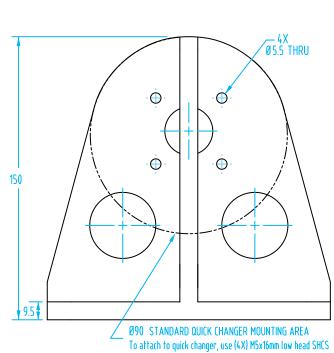


6-Axis Robot Adaptor Bracket

Quick#	Part#	Price	Quick Changer	Weight
1899	GSC-QCAP-L90SM	\$423.00	Standard (QC90)	1120g
1871	GSC-QCAP-L90	\$488.00	Large (QC150 / QC160)	3401g

#1899

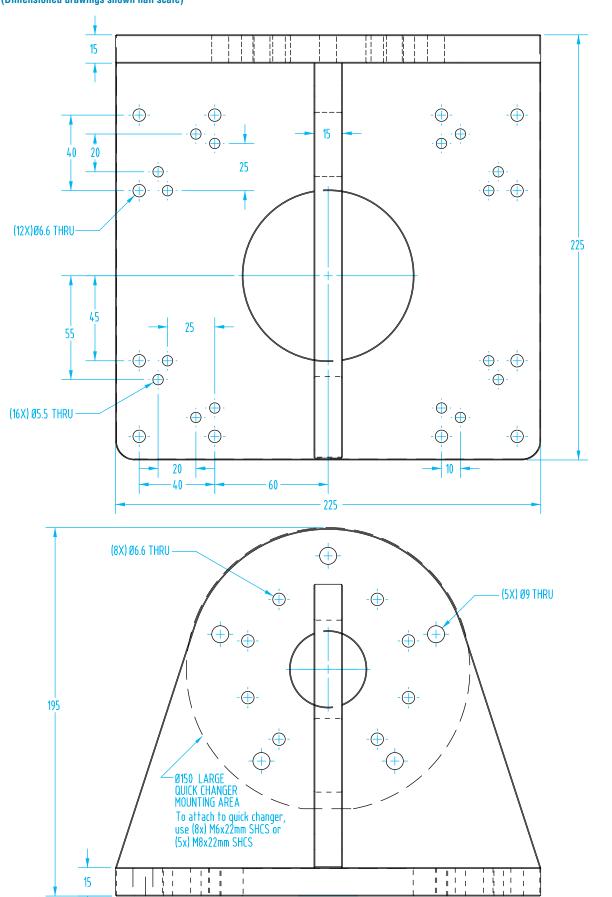






(Dimensioned drawings shown half scale)

#1871



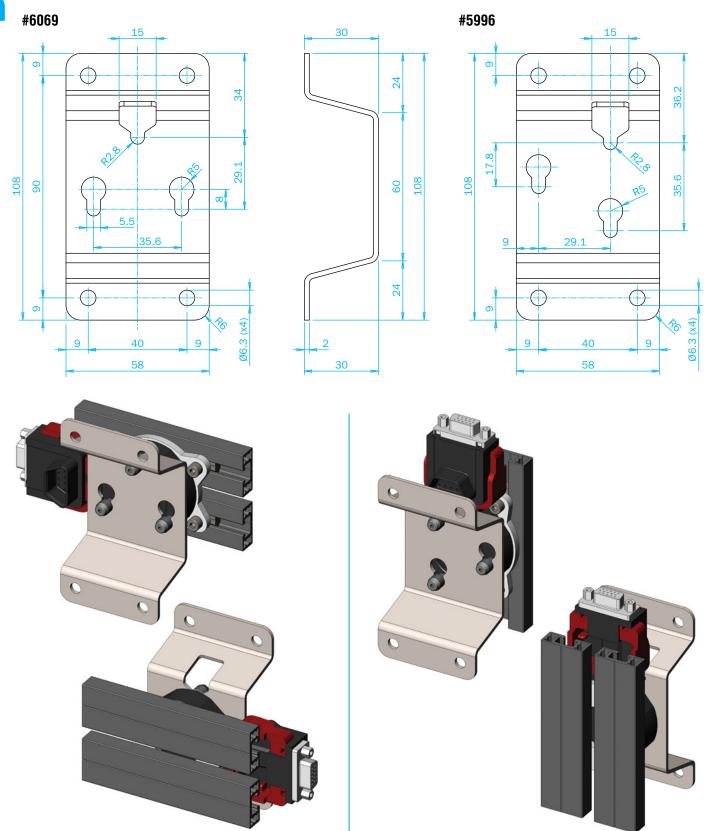


Storage Hangers for Small Size (50mm) Quick Changers

(Dimensioned drawings reduced to fit)

Small Size (50mm) EOAT Storage Hangers

Quick#	Part#	Price	Туре	Wt.
6069	QC50-H	\$20.75	Horizontal	190g
5996	QC50-V	\$20.75	Vertical	190g



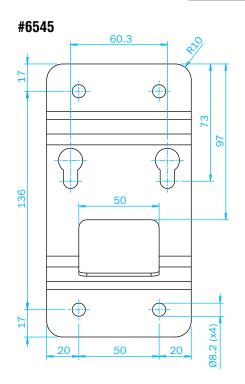


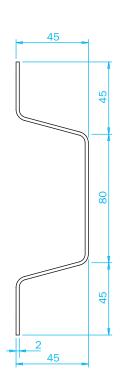
Storage Hangers for Standard Size (90mm) Quick Changers

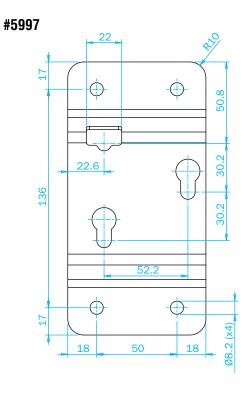
(Dimensioned drawings reduced to fit)

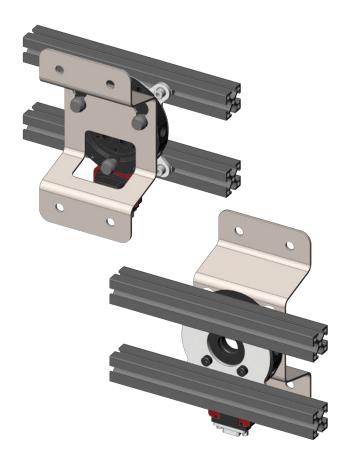
Standard Size (90mm) EOAT Storage Hangers

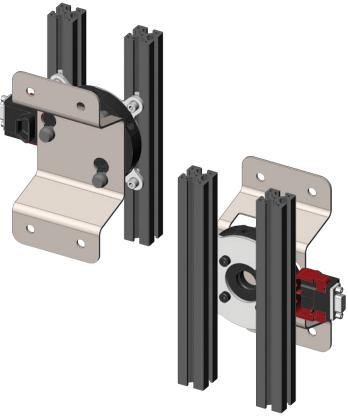
Quick#	Part#	Price	Type	Wt.
6545	QC90-H	\$32.86	Horizontal	435g
5997	QC90-V	\$32.86	Vertical	435g













Storage Hangers for Large & Jumbo (150/160 & 200mm) Quick Changers

(Dimensioned drawings reduced to fit)

Large Size (150mm / 160mm) EOAT Storage Hangers

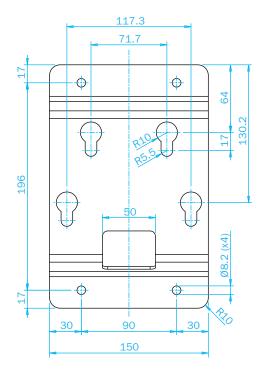
Quick#	Part#	Price	Туре	Wt.
6546	QC150-H	\$38.27	Horizontal	950g
5998	QC150-V	\$38.27	Vertical	950g

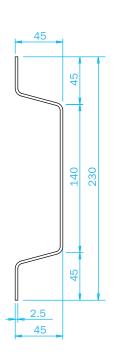
Jumbo Size (200mm) EOAT Storage Hangers

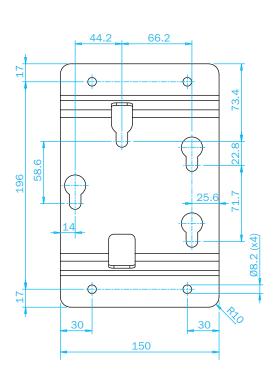
Quick#	Part#	Price	Type	Wt.
6076	QC200-H	\$49.24	Horizontal	1900g
5999	QC200-V	\$49.24	Vertical	1900g

#5999

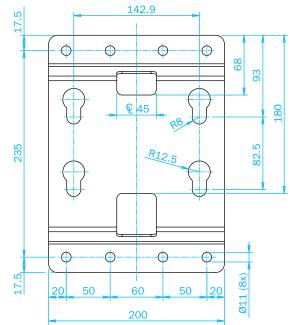
#6546 #5998

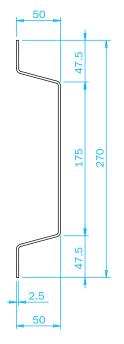






#6076





200



>ASS< Quick Changer Storage Hangers

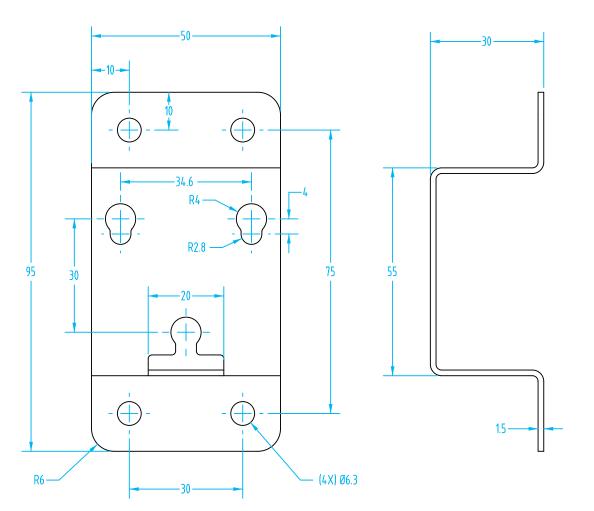
(Dimensioned drawing shown full scale)

- Wall mount bracket for proper storage of End-of-Arm Tooling using SWH or other compatible quick changer.
- Dimensional drawings for #3946 & #3947 can be found online.



>ASS< Round QC Storage Hangers (Steel)

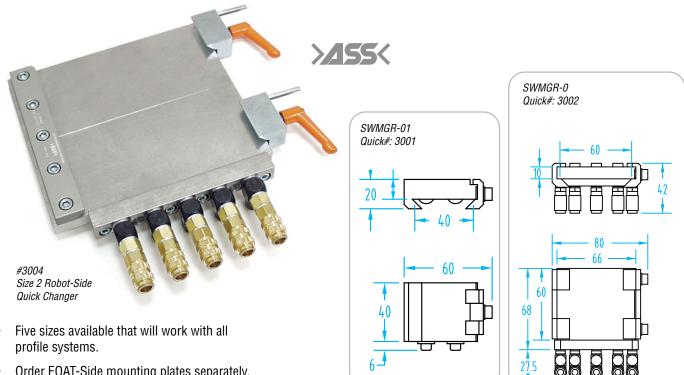
Quick#	Part#	>ASS< #	Price	For Quick Changer:	Wt.
3945	GHV-SWH-G-50	1-022-05-00	\$19.43	SWH_50 (50mm)	76g
3946	GHV-SWH-G-90	1-022-09-00	\$30.98	SWH_90 (90mm)	225g
3947	GHV-SWH-G-150	1-022-15-00	\$35.70	SWH_150 (150mm)	518g



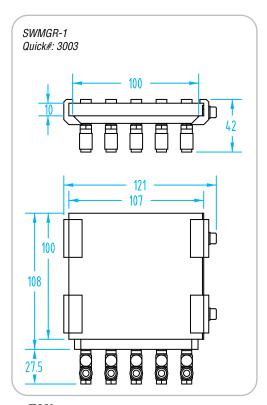


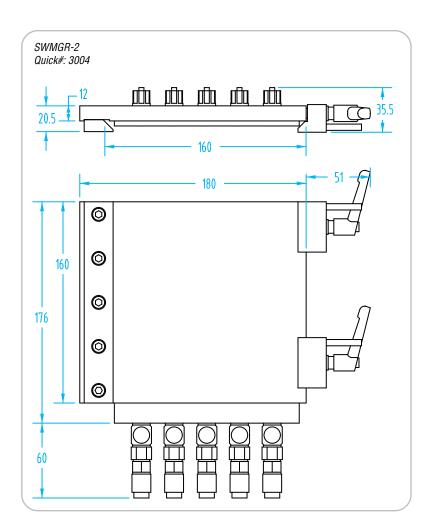
Dovetail Quick Changer – Robot-Side – With Fittings

(Dimensioned drawings shown 1/3 scale)



- Order EOAT-Side mounting plates separately, see page 68.
- Safety loads listed on page 68.
- See page 69 for additional quick disconnect nipples.
- See page 69 for storage hangers.







Dovetail Quick Changer – Robot-Side – With Fittings

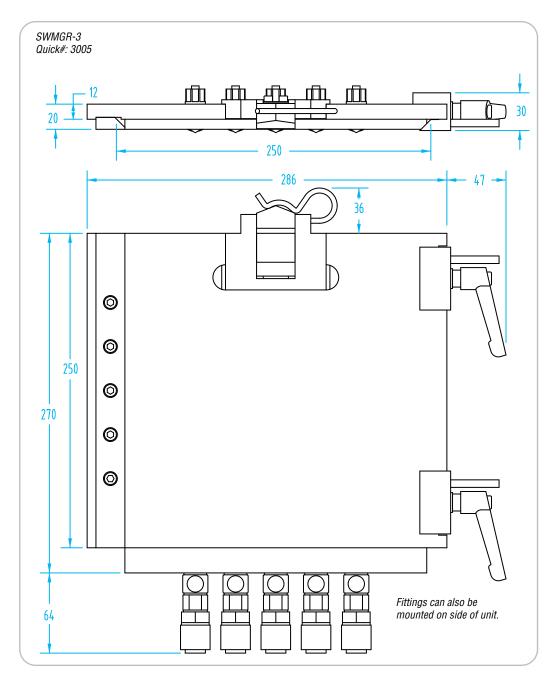
(Dimensioned drawings shown 1/3 scale)

Robot Plate (with fittings)

Quick#	Part#	>ASS< #	Price	Wt.	STN nipple size
3001	SWMGR-01	1-000-05-00	\$285.60	110g	-
3002	SWMGR-0	1-000-10-00	\$357.00	362g	M5
3003	SWMGR-1	1-000-15-00	\$467.25	570g	M5
3004	SWMGR-2	1-000-20-00	\$619.50	1772g	G1/8"
3005	SWMGR-3	1-000-25-00	\$829.50	4570g	G1/4"

Note: Each SWM robot-side plate includes a set of 5 plug-in nipples (not pictured).

Use Quick#s for easy online ordering.



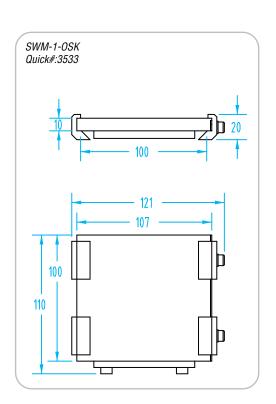


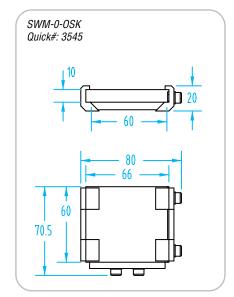
Dovetail Quick Changer – Robot-Side – No Fittings

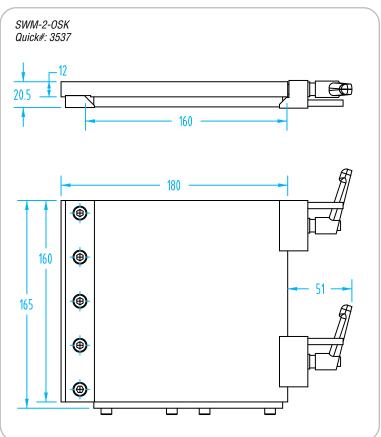
(Dimensioned drawings shown 1/3 scale)



- Four sizes available that will work with all profile systems.
- Safety loads listed on page 68.
- Order EOAT-Side mounting plates separately, see page 68.
- See page 69 for additional quick disconnect nipples.
- See page 69 for storage hangers.







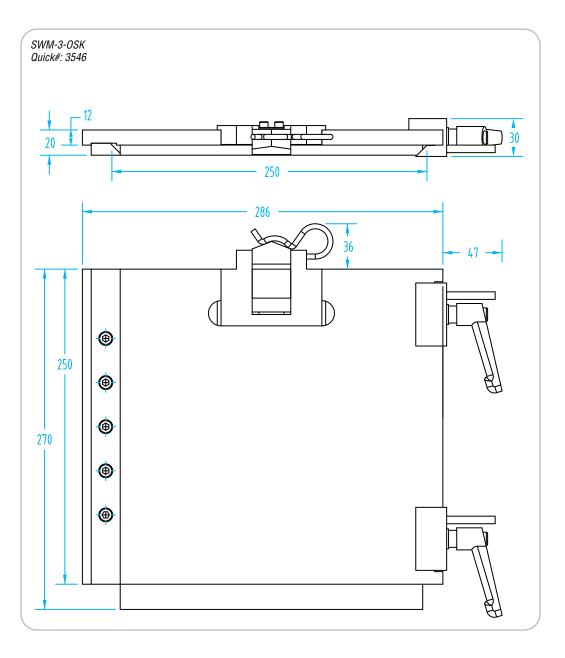


Dovetail Quick Changer – Robot-Side – No Fittings

(Dimensioned drawings shown 1/3 scale)

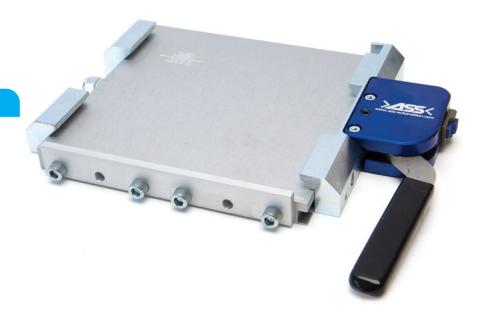
Robot Plate (without fittings)

Quick#	Part#	>ASS< #	Price	Wt.
3545	SWM-0-0SK	1-000-40-00	\$301.35	362g
3533	SWM-1-0SK	1-000-43-00	\$397.95	570g
3537	SWM-2-0SK	1-000-46-00	\$472.50	1772g
3546	SWM-3-0SK	1-000-49-00	\$786.45	4010g





Dovetail One-Handle Quick Changer – Robot-Side – No Fittings



This dovetail style quick changer features a single hand locking mechanism. A safety latch prohibits accidental opening. An optional IES-8 sensor can be used to verify the locked position.

- Dovetail-type EOAT mounting plate.
- With integrated safety lock that prevents unwanted opening of the lever.
- Compatible with all profile systems.
- Safety loads listed on page 68.
- Order EOAT-Side mounting plates separately, see page 68.
- See page 69 for storage hangers.

Robot Plate (without fittings)

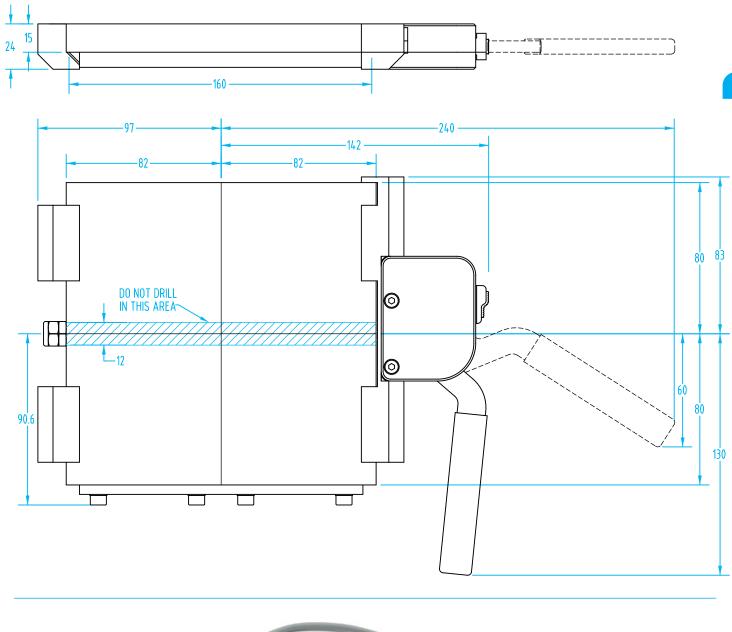
Quick#	Part#	>ASS< #	Price	Wt.
3845	SWM-2-KH-OSK	1-000-66-00	\$495.60	1900g





Dovetail One-Handle Quick Changer – Robot-Side – No Fittings

(Dimensioned drawings shown 1/2 scale)





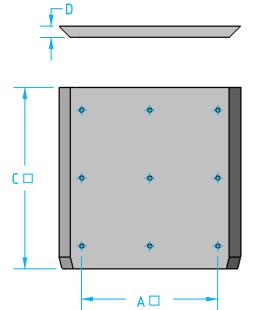
Sensor IES 8, 3 pin male plug in PNP or NPN. Extension cable KG 8-3 (6' length) is included.

Quick#	Part#	Price	Туре	Signal	Connection	Power Supply	Max. Switching Frequency	Voltage Drop	Operating Temperature	IEC Rating	Cable
3805	IES-8-PNP	\$49.60	3-wire inductive rectangle	PNP	M8 & .16m lead	12-30V dc	2000 Hz	1.8V	-22–185°F	IP 67	PUR
3806	IES-8-NPN	\$65.40	3-wire inductive rectangle	NPN	M8 & .16m lead	12–30V dc	2000 Hz	1.8V	-22 −185°F	IP 67	PUR



Dovetail EOAT-Side Mounting Plates

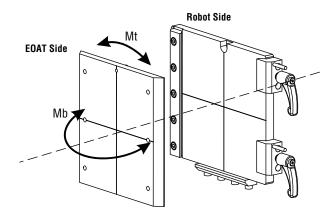




EOAT-Side Mounting Plate

Quick#	Part#	>ASS< #	Price	A	C	D	Wt.	Profile	Description
3009	GPMGR-01	1-005-05-00	\$11.55	-	40	8	29g	ANY	Solid
3010	GPMGR-0	1-005-10-00	\$14.18	35	60	8	68g	ANY	Pre-located center-punched holes
3011	GPMGR-0M	1-005-15-00	\$18.38	35	60	8	71g	L	M4 tapped threads
3012	GPMGR-1	1-005-25-00	\$17.85	70	100	8	196g	ANY	Pre-located center-punched holes
3014	GPMGR-1X	1-005-30-00	\$27.30	70	100	8	191g	Х	Thru holes with counter bore. Includes M5 screws and slotted nuts
3015	GPMGR-2	1-005-40-00	\$26.78	120	160	10	639g	ANY	Pre-located center-punched holes
3016	GPMGR-2X	1-005-45-00	\$44.63	120	160	10	710g	Х	Thru holes with counter bore. Includes M5 screws and slotted nuts
3017	GPMGR-2J	1-005-50-00	\$47.25	120	160	10	745g	J	Thru holes with counter bore. Includes M6 screws and slotted nuts
3018	GPMGR-3	1-005-60-00	\$42.00	200	250	10	1665g	ANY	Pre-located center-punched holes
3019	GPMGR-3X	1-005-65-00	\$59.85	200	250	10	1596g	Х	Thru holes with counter bore. Includes M5 screws and slotted nuts
3020	GPMGR-3J	1-005-70-00	\$62.48	200	250	10	1592g	J	Thru holes with counter bore. Includes M6 screws and slotted nuts

Use Quick#s for easy online ordering.



>ASS< Dovetail QC Safety Loads

Dovetail Size	Mt	Mb	Suggested Payload
01	8.9	7.4	2.2 lbs
0	25.8	22.1	11.0 lbs
1	47.9	47.9	22.0 lbs
2	88.5	81.1	44.1 lbs
3	243.4	236.0	88.2 lbs

Mt= Torque Moment Limit Mb= Bending Moment Limit



Storage Hangers for >ASS< Dovetail Quick Changers

- Dovetail-type EOAT storage plate.
- This new version is stamped from stainless steel and has a lower price than the previous, CNC machined version.
- Each plate is designed to mount on any of our our profiles.
- Channel nuts and screws are included.
- Dimensional drawings coming soon!

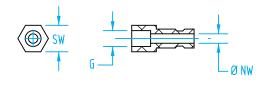


>ASS< Dovetail Storage Hangers (Stainless Steel)

Quick#	Part#	>ASS< #	Price	For Quick Changer:	Overall Dimensions (h x w)	Wt.
3940	GHV-01-ND	1-006-04-00	\$24.15	GPM 01	50 x 80 mm	110g
3941	GHV-0-ND	1-006-07-00	\$25.20	GPM 0	50 x 100 mm	315g
3942	GHV-1-ND	1-006-10-00	\$30.45	GPM 1	80 x 140 mm	1090g
3943	GHV-2-ND	1-006-13-00	\$42.00	GPM 2	115 x 210 mm	1150g
3944	GHV-3-ND	1-006-16-00	\$52.50	GPM 3	135 x 300 mm	2400g

Dovetail Plug-In Nipples





STN Plug-In Nipples (Brass)

Quick#	Part#	>ASS< #	Price	G	ØNW	SW	Wt.	for SWM:
3006	STNM5	1-862-10-00	\$2.63	M5	2.5	7	3g	GR0, GR1
3007	STN1/8	1-862-12-00	\$2.10	G1/8"	5	14	14g	GR2
3008	STN1/4	1-862-14-00	\$2.10	G1/4"	7	17	25g	GR3

See page 1043 for Tubing & Fittings.



Dovetail Quick Changer - Robot Side - Size 2



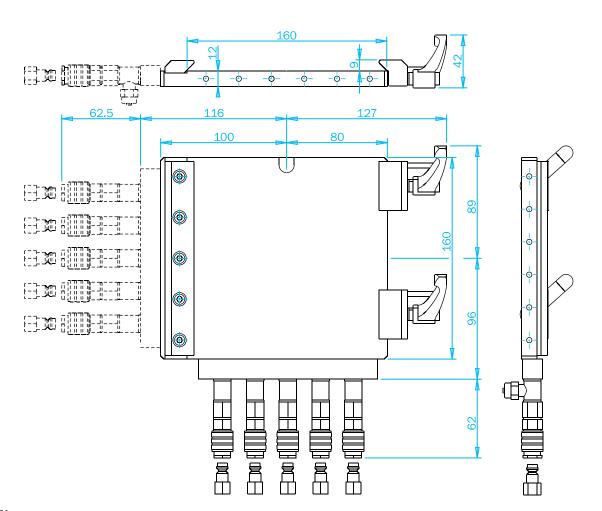
(Dimensioned drawing reduced to fit)



Robot-Side, Size 2

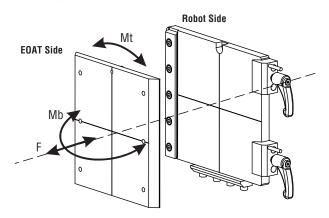
Suggested payload: 44.0 lbs.

Quick#	Part#	Description	Price	Wt.
5772	MFI-A42	Robot Plate (only)	\$519.00	1270g
5773	MFI-A131	Robot Plate with Fittings	\$596.00	1650g
5774	MFI-A132	Fittings bar	\$132.00	450g
5775	MFI-A134	Nipples for EOAT	\$8.76 (Quantity: 5)	40g
6082	MFI-A43-H	Storage Hanger	\$43.55	-





(Dimensioned drawing reduced to fit)



Specifications	Specifications for Size 2 Dovetail Quick Changer					
Maximum Air Press	6 bar (87psi)					
Safety Loads:						
F 89.9 lbf.	Mt 88.5 ft-	lbs. Mb 59 ft-lbs.				

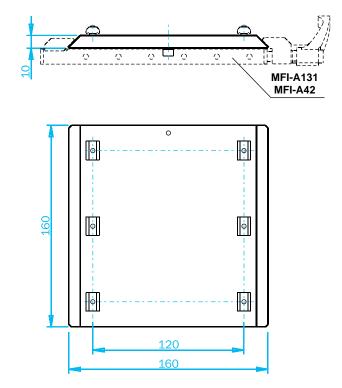
F= Axial Load Limit Mt= Torque Moment Limit Mb= Bending Moment Limit

Dovetail Mounting Plate – EOAT Side – Size 2



EOAT-Side, Size 2

Quick#	Part#	Price	Wt.
5776	MFI-A43	\$43.68	670g







Dovetail Quick Changer - Robot Side - Size 1

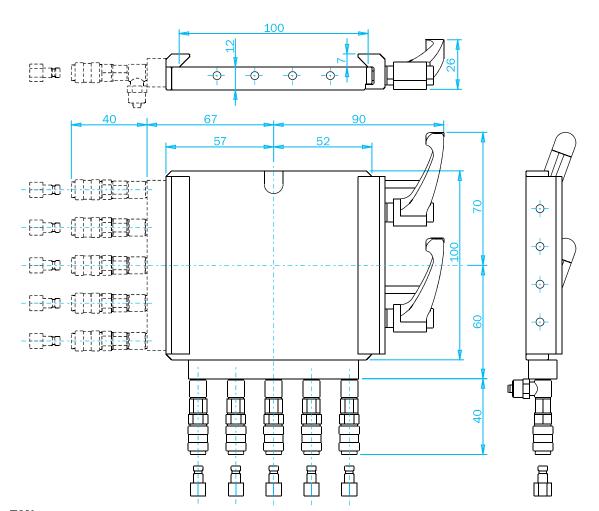
(Dimensioned drawing reduced to fit)



Robot-Side, Size 1

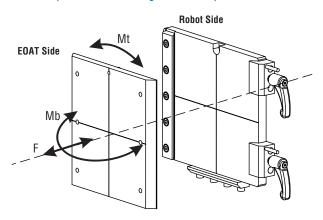
Quick# Part# **Description** Price Wt. 5777 MFI-A40 Robot Plate (only) \$327.00 500g 5778 MFI-A130 Robot Plate with fittings \$411.00 620g 5779 MFI-A133 Fittings bar \$118.00 140g \$10.34 5780 MFI-A135 Nipples for EOAT 17g (Quantity: 5) 6081 MFI-A41-H Storage Hanger \$31.95

• Suggested payload: 22 lbs.





(Dimensioned drawing reduced to fit)



Specifications for Size 1 Dovetail Quick Changer				
Maximum Air Pre	essure	6 bar (87psi)		
Safety Loads:				
F 45 lbf.	Mt 33.2 ft-lb	s. Mb 22.1 ft-lbs.		

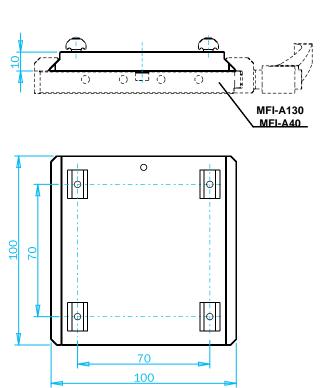
F= Axial Load Limit Mt= Torque Moment Limit Mb= Bending Moment Limit

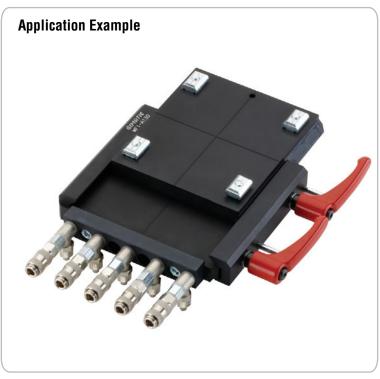
Dovetail Mounting Plate - EOAT Side - Size 1



EOAT-Side, Size 1

Quick#	Part#	Price	Wt.
5781	MFI-A41	\$27.04	270g







Dovetail Quick Changer - Robot Side - Size 0

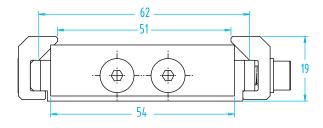
(Dimensioned drawing shown full scale)

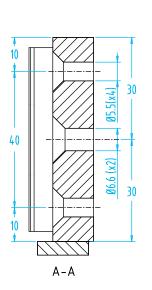


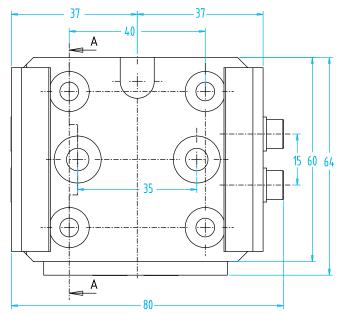
Robot-Side, Size 0

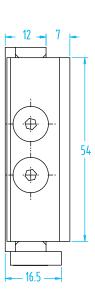
Suggested payload: 6.6 lbs.

Quick#	Part#	Description	Price	Wt.
6078	MFI-A343E	Robot Plate (only)	\$181.00	165g
6080	MFI-A344-H	Storage Hanger	\$26.14	-





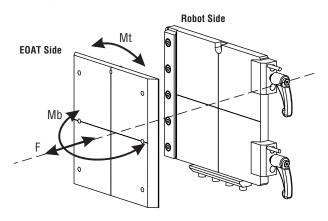






Dovetail Mounting Plate - EOAT Side - Size 0

(Dimensioned drawing shown full scale)



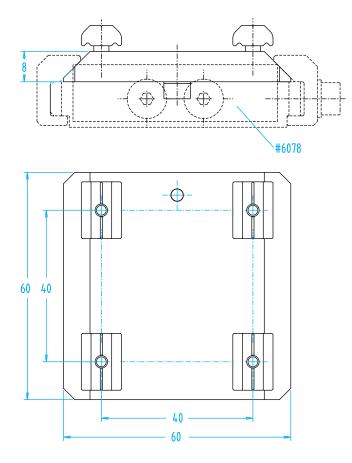
Specifications for Size O Dovetail Quick Changer								
Maximum Air Press	sure	6 bar (87psi)						
Safety Loads:								
F 13.5 lbf.	Mt 6.6 ft-lb	s. Mb 4.4 ft-lbs.						

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



EOAT-Side, Size 0

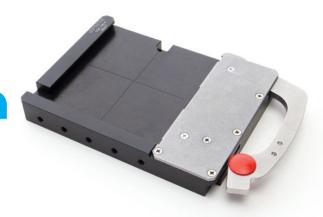
Quick#	Part#	Price	Wt.
6079	MFI-A344	\$19.76	65g



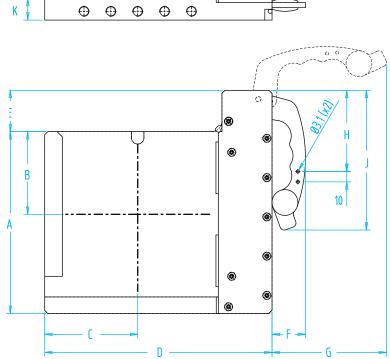




Dovetail One-Handle Quick Changer – Robot Side



- Dovetail-type EOAT mounting plate with one handle for safer operation.
- Uses the same EOAT mounting plates, order separately.
- Optional Gimatic SS.. sensors detect closed position. See page 1002.
- See page 83 for storage hangers.



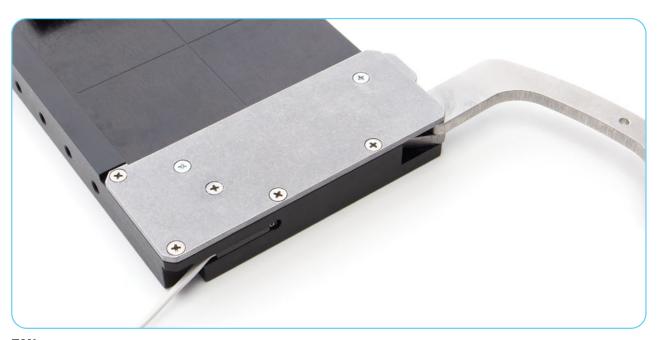
Dovetail Quick Changer with One Handle



Quick#	Part#	Mounting Plate (order separately)	Price	Wt.
7568	SQC100-A	Size 1 Q#5781 (MFI-A41)	\$484.00	770g
7569	SQC160-A	Size 2 Q#5776 (MFI-A43)	\$602.00	2050g
7570	SQC250-A	Size 3 Q#7529 (MFI-A363)	\$779.00	3720g

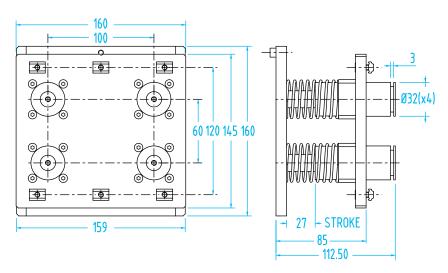
Quick#	A	В	C	D	E	F	G	Н	J	K	F lbs	Mt ft-lbs	Mb ft-lbs	Payload lbs
7568	110	50	57	147	5.5	28	76.6	55.5	100	19	45	33.2	22.1	22
7569	176	80	90	220	40	32.3	110.8	78.6	135.3	21	89.9	88.5	59	44
7570	270	125	150	325	40	32.3	110.8	78.6	135.3	20	179.8	221.3	147.5	88

F= Axial Load Limit Mt= Torque Moment Limit Mb= Bending Moment Limit (See drawing on page 75.)





Dovetail EOAT Side Mounting Plates – with Springs



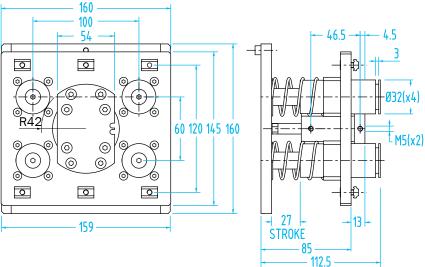
NEW

EOAT-Side with Hard Springs

Quick#	Part#	Price	Wt.	
7648	SQM160-B	\$617.00	2634g	

Note: Includes mounting hardware





NEW

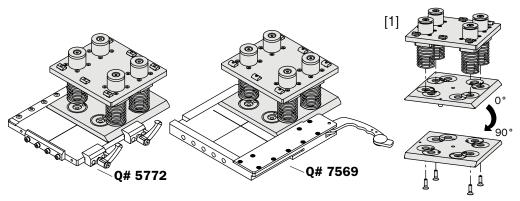
EOAT-Side with Soft Springs and Cylinder

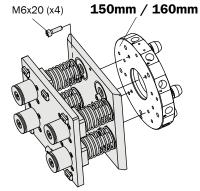
Quick#	Part#	Price	Wt.
7649	SQP160-B	\$630.00	2898g

Note: Includes mounting hardware See page 1002 for optional C-Slot sensors



- · Easily add compliance to your EOAT with two different spring options.
- Gripper side SQM160-B with hard springs.
- Gripper side SQP160-B with soft springs and double-acting cylinder and is intended for locking in fully extended or compressed positions. Cylinder bore: 40mm with a force of 754N at 6bar.
- Plate can be rotated 90° [1].
- Compatible with Size 2 Dovetail QC's and, Large (150mm / 160mm) Round QC's.
- Payload: 44lbs (20kg); Mt: 120Nm; Mb: 80Nm.







How to Convert from Dovetail to Round Quick Changers

EMI's approach to converting and interchanging your robot from a Dovetail to Round Quick Changer.

Dovetail quick changers have a long legacy in the plastics industry and EMI continues to design, assemble and support End of Arm Toolings with this style of quick changers. As customers expand to more complex injection molding processes, more advanced features and functions may be required from tending robots and EOAT; That's where Round Style Quick Changers come into play.

This in-stock EMI solution can quickly retrofit your existing dovetail QC's to easily begin using round QC's without having to remove your existing Dovetail Robot Side Quick Changer! By doing so, this allows you to convert from Dovetail QC to Round QC's at your own pace!

Here are some of the features that Round Style Quick Changers offer, and why EMI has developed this guide to seamlessly convert or interchange quick changers in your facility:

- Safety: Designated compressed air, vacuum, and electrical circuits ensure that actuators such as sprue grippers, nippers, cylinders and other circuits do not cross, increasing safety and protecting your equipment.
- Standardization: Consistent pneumatic and electrical connections across your plant. If your mold runs in the US, Canada or Mexico, Round Quick Changers enable EOAT consistency across your entire company.
- Efficiency: Downtime spent manually plumbing and wiring can be detrimental to your production. Round Quick Changers cut down installation time by offering up to 12 pneumatic and 30 electrical connections.



View our How-To Overview Video! www.youtube.com/emicorpvideo

EMI offers 2 options to implement Round Quick Changers in your plant:



- Quick Changer Transition at your own pace
 - Keep your Dovetail QC while adding a Round QC.
 - · Existing Dovetail EOAT can still be used.
 - Newer EOAT with Round Quick Changers can also be used.
 - EMI offers all the components needed for a seamless transition.
 - Although this is mechanically sound, this should be considered as an intermediate step in an overall process towards a full quick changer conversion (below).



Full Quick Changer Conversion

- EMI will work with you to design the right adapter plate to fit your robot.
- Remove existing Dovetail Quick Changer from EOAT and Robot.
- Use in-stock adaptor plates to install your Round Quick Changer on both sides.
- EMI recommends this permanent configuration when fully converting to round quick changers.

Whether your plant uses Dovetail or Round Quick Changers, EMI is here to support all your EOAT needs!



How to Convert from Dovetail to Round Quick Changers

STEP 1 WHAT SIZE IS YOUR CURRENT DOVETAIL QC?









Size 0 (□60mm)

Size 1 (□100mm)

,

$_{ t step}\, 2$ choose the compatible round qc

Choose the corresponding Senvex / WGS, Gimatic or >ASS< Round Quick Changers. Electrical connectors and other accessories are sold separately.

Advanced Tip: Always consider payload when sizing a Quick Changer. Contact EMI if you have any questions about QC specs.

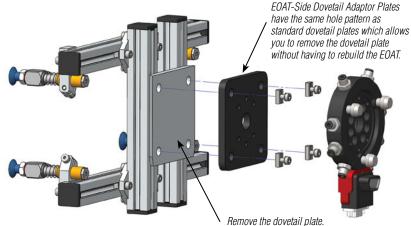


STEP 3 SELECT THE EOAT-SIDE ADAPTOR TO REPLACE THE DOVETAIL QC

This adaptor will be the same size as your existing dovetail quick changer.

Simply remove the existing Dovetail plate and replace it with the adaptor.

Swap your EOAT-side QC with the corresponding size adapter and use the existing hardware.

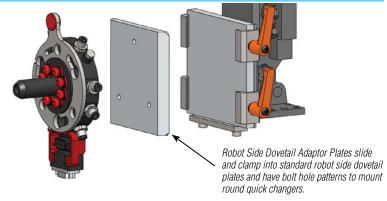


STEP 4 SELECT THE ROBOT-SIDE ADAPTOR

Lastly, select the matching size adapter plate for your robot-side QC and install the Round QC to it. This plate will look like your existing dovetail.

Your robot is now ready for Dovetail or Round QC EOAT!

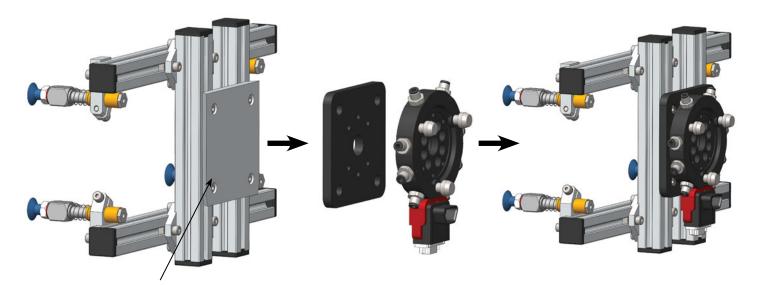
Contact EMI if you wan to attach the Round QC directly to your robot.





EOAT-Side Adaptor Plates





Remove the existing Dovetail plate and replace it with the new adaptor.

Advanced Tip: You may want to scribe the edges of your existing QC to make sure the new plate is properly aligned.

Install new EOAT-Side Adaptor Plate and Round Quick Changer.

EMI's Adaptor Plates have the same hole patterns as standard dovetail plates which allows you to remove the dovetail plate without having to rebuild the EOAT. Unbolt the standard dovetail plate and replace it with EMI's EOAT-Side Adaptor Plate and a round quick changer.

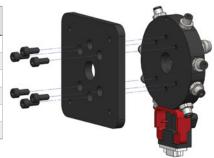
Your EOAT is ready for use!

See Round QC pages for payload information.

NEW

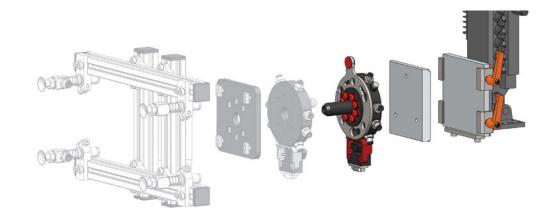
Dovetali F	DOVETAII ADAPTOT – EUAI-SIDE								
Quick#	Part#	Price	Wt.	Dovetail Size	Round QC Options	Hardware			
2451	GSC-DCP-0	\$22.50	48.5g	Size 0 (□60mm)	QC 50	4x Q# 827 and Q# 817			
2452	GSC-DCP-1	\$23.50	194.4g	Size 1 (□100mm)	QC 90	6x Q# 865 and Q# 853			
0.450	000 000 0	¢40 E0	E10.0~	512.3g Size 2 (□160mm)	QC 90	6x Q# 865 and Q# 854			
2453	GSC-DCP-2	\$43.50	512.3g		QC 150	6x Q# 880 and Q# 876			
0.45.4	GSC-DCP-3	¢70.00	1548.8g	548.8g Size 3 (□250mm)	QC 150	6x Q# 880 and Q# 878			
2454	GSU-DUP-3	C-DCP-3 \$70.00			QC 200	6x GSC-FSH-8x25			

Note: Hardware can be found on page 1076.



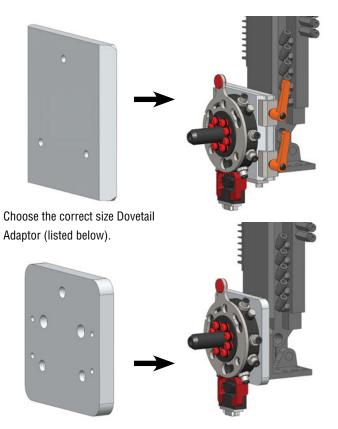


Robot-Side Adaptor Plates





Choose the appropriate size Robot-Side Round Quick Changer and accessories.



Or if you would like a custom designed plate contact us for assistance.

NEW

Dovetail Adaptor - Robot-Side

Quick#	Part#	Price	Wt.	Dovetail Size	Round QC Options	Hardware		
2455	GSC-DQCAP-0	\$25.00	66.2g	Size 0 (□60mm)	QC 50	4x Q# 827 and Q# 817		
2456	GSC-DQCAP-1	\$30.00	197.4g	Size 1 (□100mm)	QC 90	3x Q# 880 and Q# 873		
0.457	CCC DOCAD O	ФСО OO	\$60.00 641.1g Size	Ci=o 0 (□100mm)	QC 90	3x Q# 880 and Q# 873		
2457	GSC-DQCAP-2	\$60.00		Size 2 (□160mm)	QC 150	5x Q# 894 and Q# 890		
2458	000 00000 0 0000 10100-	CAP-3 \$100.00 1916.9	# 4.00.00	1010.0- 0:	0.00 4040.0	0: . 0 (5050)	QC 150	5x Q# 894 and Q# 890
2408	GSC-DQCAP-3		1916.99	Size 3 (□250mm)	QC 200	6x Q# 894 and Q# 892		

Note: Hardware can be found on page 1076.





EOAT Handle

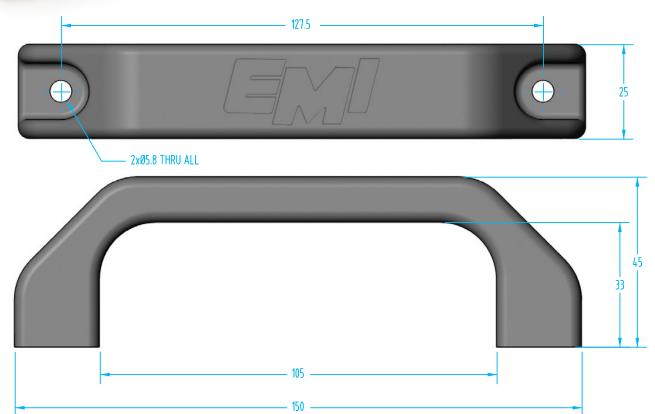


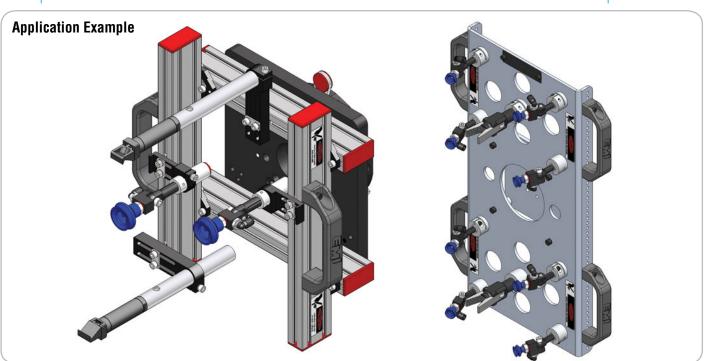


EOAT Handle

Quick#	Part#	Price	Wt.
700	EOAT-HANDLE	\$14.00	70g

Note: Includes hardware.



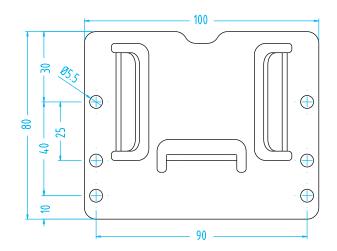




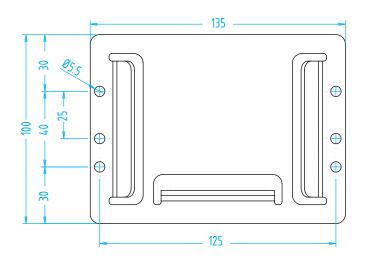
Storage Hangers for Gimatic Dovetail Quick Changers

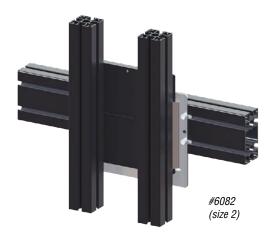
(Dimensioned drawings reduced to fit)

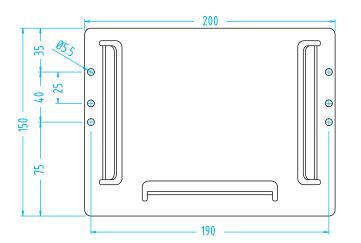












Dovetail Storage Hanger (For wall mounting and storage of EOATs)

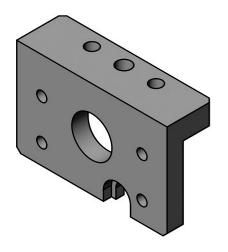
Quick#	Part#	Price	Use With
6080	MFI-A344-H	\$26.14	Size 0 Gimatic MFI-A344 (60 x 60mm)
6081	MFI-A41-H	\$31.95	Size 1 Gimatic MFI-A41 (98 x 100mm)
6082	MFI-A43-H	\$43.55	Size 2 Gimatic MFI-A43 & (158 x 160mm)

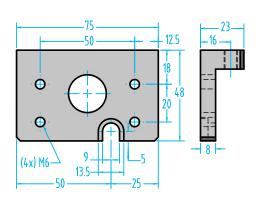


Star® EOAT-Side Quick Changers

(Dimensioned drawing shown half scale)

#2072, Small size

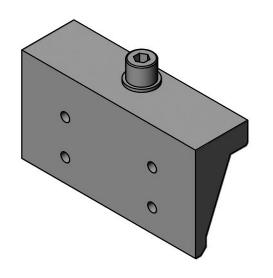


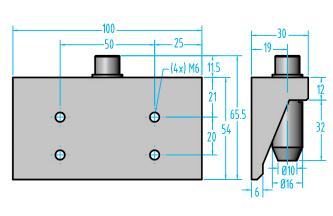


EOAT-Side Star Manual Quick Changer (Aluminum)

Quick#	Part#	Payload Capacity	Price	Wt.
2072	GSQ-0A-SSI	22lbs	\$67.70	97g

#5627, Medium size





EOAT-Side Star Manual Quick Changer (Aluminum)

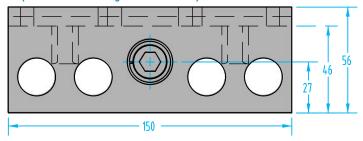
Quick#	Part#	Payload Capacity	Price	Wt.
5627	GSQ-OAI-SAI	33lbs	\$100.39	229g

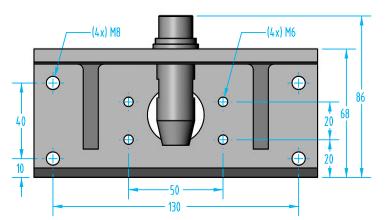
#2073, Large size



Star EOAT-Side Quick Changers

(Dimensioned drawing shown half scale)

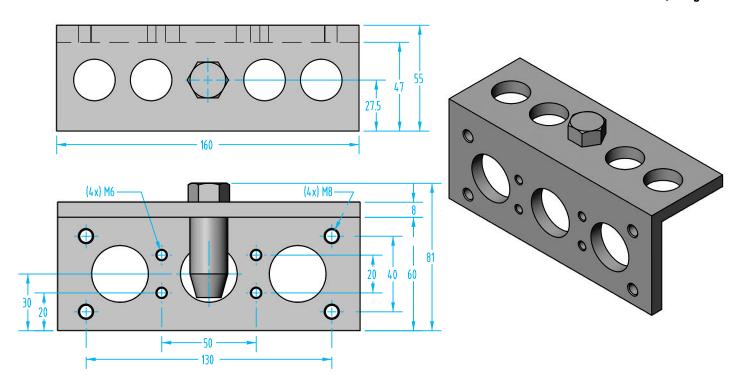




EOAT-Side Star Manual Quick Changer (Aluminum)

Quick#	Part#	Payload Capacity	Price	Wt.
2073	GSQ-OA-LAI	77lbs	\$188.39	471g

#2074, Large size



EOAT-Side Star Manual Quick Changer (Steel)

Quick#	Part#	Payload Capacity	Price	Wt.
2074	GSQ-0C-LAII	77lbs	\$187.89	1000g