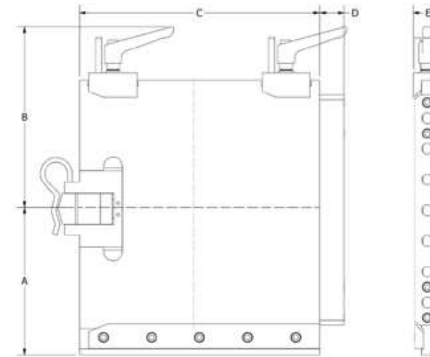


Our standard component modular system offers direct bolt-on options plus full automation for quick change overs, helping to optimize product schedules.

- Operate on **all type robots**, from 6-axis to Cartesian to collaborative
- Featuring **Cartesian-style mounts** and quick-change chucks
- **Durable, rigid** materials such as aluminum, and steel.
- Expansive product and engineering **knowledge**

QUICK CHANGE MOUNTING CHUCKS



- Adaptable to every robot.
- Economical one-time investment per robot.
- Makes EOAT interchangeable between robots.
- Minimizes downtime during setup changes.
- EOAT Gripper stays aligned & secure.
- Integrated pneumatic quick disconnect system.
- Lightweight aluminum base plates for standard applications.
- An auxiliary manifold can be attached to the side of the chuck to provide additional pneumatic quick disconnect ports.

LF-Type (Less Fitting)

- Pneumatic fitting manifold without fittings.

| | A | B | C | D | E | GPM Plate | Weight (g) | Piab No. |
|-----------------|-------|-----|-----|------|------|-----------|------------|----------|
| SWM 1 LF | 53 | 92 | 100 | 12.7 | 19 | GPM 1 | 530 | 0214632 |
| SWM 2 LF | 101 | 133 | 160 | 19 | 25.4 | GPM 2 | 1720 | 0214637 |
| SWM 3 LF | 150.5 | 189 | 250 | 25.4 | 31.8 | GPM 3 | 4000 | 0214643 |

SWM 1 LF

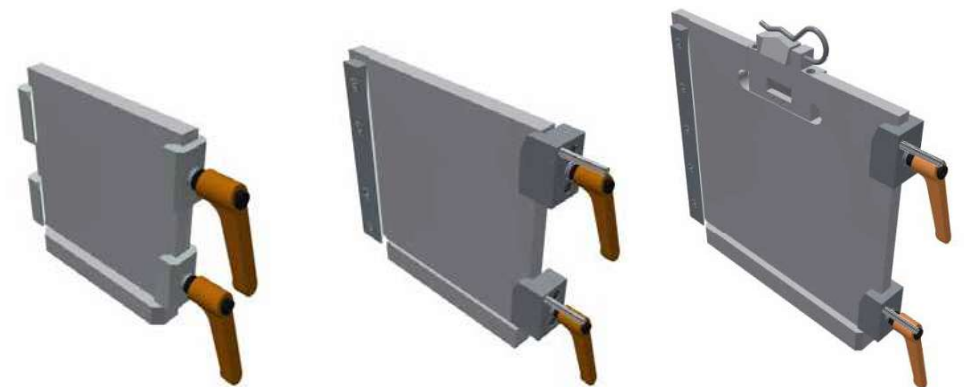
Product Code: SWM 1 LF

SWM 2 LF

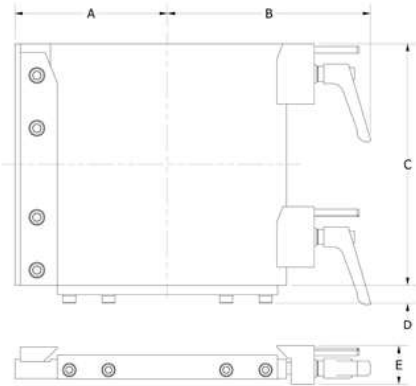
Product Code: SWM 2 LF

SWM 3 LF

Product Code: SWM 3 LF



QUICK CHANGE MOUNTING CHUCKS

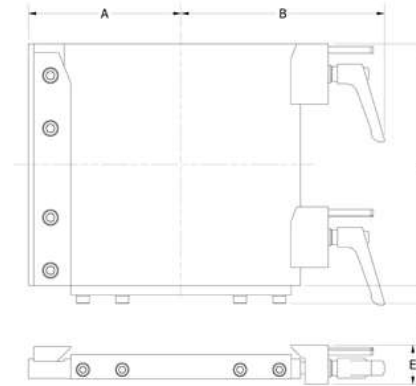


- Adaptable to every robot.
- Economical one-time investment per robot.
- Makes EOAT interchangeable between robots.
- Minimizes downtime during setup changes.
- EOAT Gripper stays aligned & secure.
- Lightweight aluminum base plates for standard applications.
- An auxiliary manifold can be attached to the side of the chuck to provide additional pneumatic quick disconnect ports.

E-Type (Economy)

- Mounting chuck without pneumatic fittings for cost savings and weight reduction.
- Best used when pneumatic connectors from robot are near to the EOAT or when EOAT may be close to the robot payload.

QUICK CHANGE MOUNTING CHUCKS



- Adaptable to every robot.
- Economical one-time investment per robot.
- Makes EOAT interchangeable between robots.
- Minimizes downtime during setup changes.
- EOAT Gripper stays aligned & secure.
- Lightweight aluminum base plates for standard applications.
- An auxiliary manifold can be attached to the side of the chuck to provide additional pneumatic quick disconnect ports.

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- Mounting chuck without pneumatic fittings for cost savings and weight reduction.
- Best used when pneumatic connectors from robot are near to the EOAT or when EOAT may be close to the robot payload.

| | A | B | C | D | E | GPM Plate | Weight (g) | Piab No. |
|----------------|----|----|-----|----|----|-----------|------------|----------|
| SWM 0 E | 38 | 43 | 60 | 8 | 19 | GPM 0 | 284 | 0214629 |
| SWM 1 E | 58 | 95 | 102 | 12 | 20 | GPM 1 | 455 | 0212939 |

| | A | B | C | D | E | GPM Plate | Weight (g) | Piab No. |
|----------------|-----|-----|-----|----|----|-----------|------------|----------|
| SWM 2 E | 101 | 132 | 160 | 12 | 25 | GPM 2 | 1639 | 0212940 |
| SWM 3 E | 152 | 192 | 250 | 14 | 32 | GPM 3 | 3680 | 0212941 |

SWM 0 E

Product Code: SWM 0 E



SWM 1 E

Product Code: SWM 1 E



SWM 2 E

Product Code: SWM 2 E

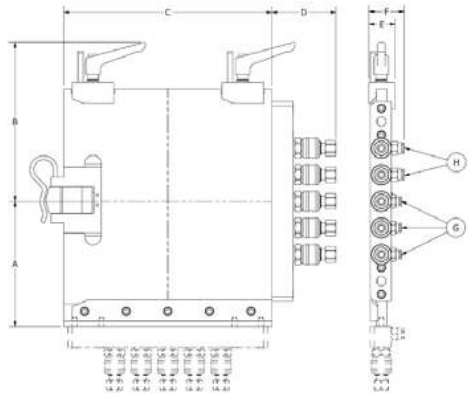


SWM 3 E

Product Code: SWM 3 E



QUICK CHANGE MOUNTING CHUCK



- Adaptable to every robot.
- Economical one-time investment per robot.
- Makes EOAT interchangeable between robots.
- Minimizes downtime during setup changes.
- EOAT Gripper stays aligned & secure.
- Integrated pneumatic quick disconnect system.
- Lightweight aluminum base plates for standard applications.
- An auxiliary manifold can be attached to the side of the chuck to provide additional pneumatic quick disconnect ports.

| | A | B | C | D | E | F | G (Tubing Size) | H (Tubing Size) | Air Coupling | Air Plug | GPM Plate | Weight (g) | Piab No. |
|----------------|----|----|-----|----|----|----|-----------------|-----------------|--------------|----------|-----------|------------|----------|
| SWM 0.1 | 27 | 35 | 40 | 10 | 19 | - | - | - | - | - | GPM 0.1 | 139 | 0214630 |
| SWM 0 | 38 | 43 | 60 | 32 | 19 | 32 | 3 tubes 4mm | 2 tubes 4mm | 92-5002 | 94-4902 | GPM 0 | 323 | 0214628 |
| SWM 1 | 58 | 95 | 102 | 34 | 19 | 32 | 3 tubes 4mm | 2 tubes 6mm | 92-5002 | 94-4902 | GPM 1 | 567 | 0212936 |

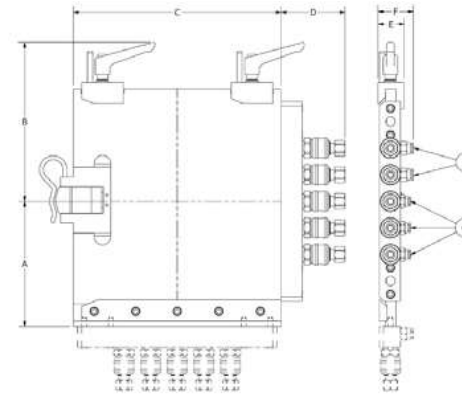
SWM 0.1
Product Code: SWM 0.1

SWM 0
Product Code: SWM 0

SWM 1
Product Code: SWM 1



QUICK CHANGE MOUNTING CHUCK



- Adaptable to every robot.
- Economical one-time investment per robot.
- Makes EOAT interchangeable between robots.
- Minimizes downtime during setup changes.
- EOAT Gripper stays aligned & secure.
- Integrated pneumatic quick disconnect system.
- Lightweight aluminum base plates for standard applications.
- An auxiliary manifold can be attached to the side of the chuck to provide additional pneumatic quick disconnect ports.

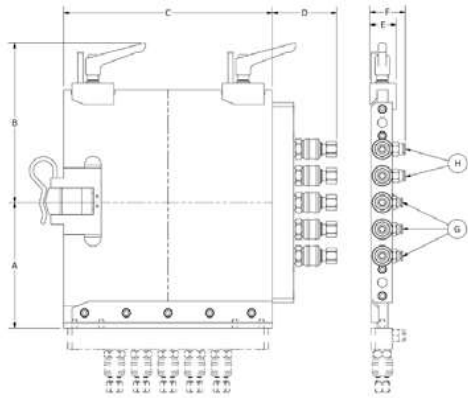
| | A | B | C | D | E | F | G (Tubing Size) | H (Tubing Size) | Air Coupling | Air Plug | GPM Plate | Weight (g) | Piab No. |
|--------------|-----|-----|-----|----|----|----|-----------------|-----------------|--------------|----------|-----------|------------|----------|
| SWM 2 | 101 | 132 | 160 | 50 | 25 | 40 | 3 tubes 6mm | 2 tubes 8mm | 92-0204 | 94-0104 | GPM 2 | 2024 | 0212937 |
| SWM 3 | 152 | 192 | 250 | 58 | 32 | 40 | 3 tubes 6mm | 2 tubes 8mm | 92-0406 | 94-0306 | GPM 3 | 4559 | 0212938 |

SWM 2
Product Code: SWM 2

SWM 3
Product Code: SWM 3



QUICK CHANGE MOUNTING CHUCKS



- Adaptable to every robot.
- Economical one-time investment per robot.
- Makes EOAT interchangeable between robots.
- Minimizes downtime during setup changes.
- EOAT Gripper stays aligned & secure.
- Integrated pneumatic quick disconnect system.
- Lightweight aluminum base plates for standard applications.
- An auxiliary manifold can be attached to the side of the chuck to provide additional pneumatic quick disconnect ports.

ST-Type (Steel)

- Steel chuck body with zinc plating for heavy duty applications.
- Steel mounting plates also available.

| | A | B | C | D | E | F | G (Tubing Size) | H (Tubing Size) | Air Coupling | Air Plug | GPM Plate | Weight (g) | Plab No. |
|-----------------|-----|-----|-----|----|----|----|-----------------|-----------------|--------------|----------|-----------|------------|----------|
| SWM 1 ST | 58 | 95 | 102 | 34 | 19 | 32 | 3 tubes 4mm | 2 tubes 6mm | 92-5002 | 94-4902 | GPM 1 | 1049 | 0214635 |
| SWM 2 ST | 101 | 132 | 160 | 50 | 25 | 40 | 3 tubes 6mm | 2 tubes 8mm | 92-0204 | 94-0104 | GPM 2 | 3623 | 0214641 |
| SWM 3 ST | 152 | 192 | 250 | 58 | 32 | 40 | 3 tubes 6mm | 2 tubes 8mm | 92-0406 | 94-0306 | GPM 3 | 7938 | 0214647 |

SWM 1 ST

Product Code: SWM 1 ST



SWM 2 ST

Product Code: SWM 2 ST

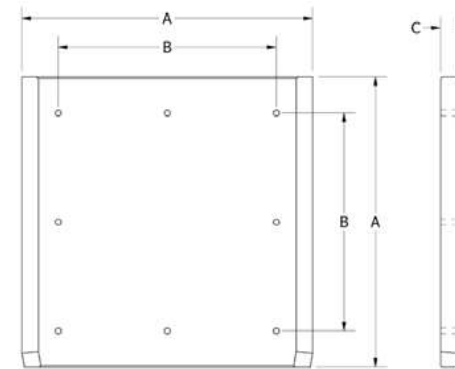


SWM 3 ST

Product Code: SWM 3 ST



QUICK CHANGE MOUNTING PLATES



- Low cost dove-tail mounting plate for grippers.
- Can be used with or without SWM Quick Change Chuck.
- Lightweight aluminum plates for standard applications.

L-Type

- Pre-drilled with M4 threaded holes.
- Usually used with L-18/10 profile.

| | A | B | C | SWM Chuck | Weight (g) | Material | Plab No. |
|----------------|-----|----|---|-----------|------------|----------|----------|
| GPM 0 L | 60 | 35 | 8 | SWM 0 | 74 | Aluminum | 0214529 |
| GPM 1 L | 100 | 70 | 8 | SWM 1 | 205.5 | Aluminum | 0214331 |

GPM 0 L

Product Code: GPM 0 L

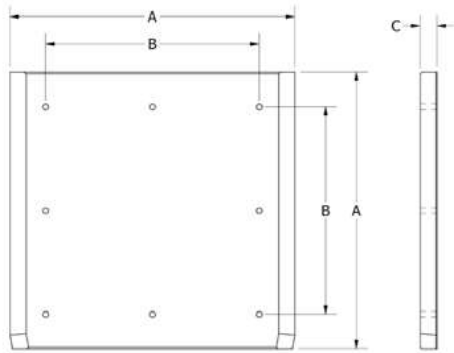


GPM 1 L

Product Code: GPM 1 L



QUICK CHANGE MOUNTING PLATES



- Low cost dove-tail mounting plate for grippers.
- Can be used with or without SWM Quick Change Chuck.
- Lightweight aluminum plates for standard applications.
- Comes with predrilled pilot holes to assist with drilling custom hole sizes.

| | A | B | C | SWM Chuck | Weight (g) | Material | Plab No. |
|----------------|-----|-----|----|-----------|------------|----------|----------|
| GPM 0.1 | 40 | — | 8 | SWM 0.1 | 74 | Aluminum | 0214330 |
| GPM 0 | 60 | 35 | 8 | SWM 0 | 74 | Aluminum | 0214328 |
| GPM 1 | 100 | 70 | 8 | SWM 1 | 205.8 | Aluminum | 0212942 |
| GPM 2 | 160 | 120 | 10 | SWM 2 | 578 | Aluminum | 0212943 |
| GPM 3 | 250 | 200 | 10 | SWM 3 | 1595 | Aluminum | 0212944 |

GPM 0.1
Product Code: GPM 0.1

GPM 0
Product Code: GPM 0

GPM 1
Product Code: GPM 1

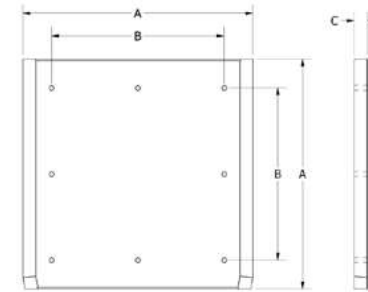


GPM 2
Product Code: GPM 2

GPM 3
Product Code: GPM 3



QUICK CHANGE MOUNTING PLATES



- Low cost dove-tail mounting plate for grippers.
- Can be used with or without SWM Quick Change Chuck.
- Lightweight aluminum plates for standard applications.

ST-Type (Steel)

- Recommended for use only with steel SWM plates.
- Use with steel SWM plates for heavy duty applications.
- Comes with predrilled pilot holes to assist with drilling custom hole sizes.

X-Type

- Pre-set for mounting profile.
- X plates pre-drilled for 5mm cap screws and include 6 screws, lock washers, and GWP 5X channel nuts.

| | A | B | C | SWM Chuck | Weight (g) | Material | Plab No. |
|-----------------|-----|-----|----|-------------|------------|----------|----------|
| GPM 2 ST | 160 | 120 | 10 | SWM 2 Steel | 1815.2 | Steel | 0214335 |
| GPM 3 ST | 250 | 200 | 10 | SWM 3 Steel | 4627 | Steel | 0214339 |

| | A | B | C | SWM Chuck | Weight (g) | Material | Plab No. |
|----------------|-----|-----|----|-----------|------------|----------|----------|
| GPM 1 X | 100 | 70 | 8 | SWM 1 | 232 | Aluminum | 0212945 |
| GPM 2 X | 160 | 120 | 10 | SWM 2 | 669 | Aluminum | 0212946 |
| GPM 3 X | 250 | 200 | 10 | SWM 3 | 1642.5 | Aluminum | 0212947 |

GPM 2 ST
Product Code: GPM 2 ST

GPM 3 ST
Product Code: GPM 3 ST



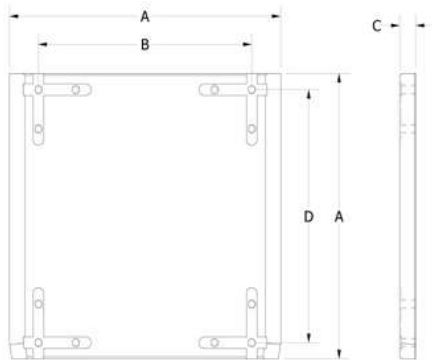
GPM 1 X
Product Code: GPM 1 X

GPM 2 X
Product Code: GPM 2 X

GPM 3 X
Product Code: GPM 3 X



QUICK CHANGE MOUNTING PLATES



- Low cost dove-tail mounting plate for grippers.
 - Can be used with or without SWM Quick Change Chuck.
 - Lightweight aluminum plates for standard applications.
- T-Type (Tubing)**
- Used with tube style framework.
 - Has tapped holes for KVB clamps.

| | A | B | C | SWM Chuck | Weight (g) | Material | Plab No. |
|-------------------|-----|----|----|-----------|------------|----------|----------|
| GPM 1-14 T | 100 | 22 | 8 | SWM 1 | 198.3 | Aluminum | 0214333 |
| GPM 2-14 T | 160 | 22 | 10 | SWM 2 | 560 | Aluminum | 0214336 |
| GPM 2-20 T | 160 | 28 | 10 | SWM 2 | 555 | Aluminum | 0214337 |
| GPM 3-20 T | 250 | 28 | 10 | SWM 3 | 1560 | Aluminum | 0214340 |
| GPM 3-30 T | 250 | 38 | 10 | SWM 3 | 1588 | Aluminum | 0214341 |

GPM 1-14 T
Product Code: GPM 1-14 T



GPM 2-14 T
Product Code: GPM 2-14 T



GPM 2-20 T
Product Code: GPM 2-20 T



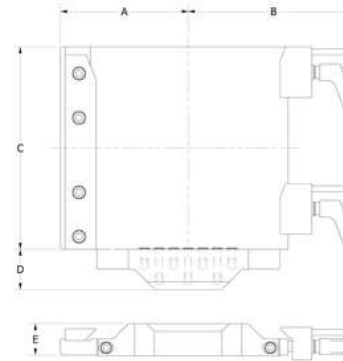
GPM 3-20 T
Product Code: GPM 3-20 T



GPM 3-30 T
Product Code: GPM 3-30 T



SEMI-AUTOMATIC QUICK CHANGE MOUNTING CHUCKS



- No need for hose clearance below the chuck.
- Automatically couples air and vacuum lines.
- Must be used with GPM SA mounting plates.
- Uses "S" style fittings (not included).
- Adaptable to every robot.
- Economical one-time investment per robot.
- Makes EOAT interchangeable between robots.
- Minimizes downtime during setup changes.
- EOAT Gripper stays aligned & secure.
- Lightweight aluminum base plates for standard applications.

| | A | B | C | D | E | F | G (Tubing Size) | # of Ports | GPM Plate | Weight (g) | Plab No. |
|-----------------|-----|-----|-----|----|----|----|-----------------|------------|-----------|------------|----------|
| SWM 1 SA | 57 | 94 | 102 | 25 | 32 | 45 | 4/6mm | 7 | GPM 1 SA | 575 | 0214634 |
| SWM 2 SA | 101 | 130 | 160 | 32 | 25 | 41 | 6 | 7 | GPM 2 SA | 1786.5 | 0214640 |
| SWM 3 SA | 150 | 180 | 250 | 32 | 25 | 43 | 6 | 10 | GPM 3 SA | 4100 | 0214646 |

SWM 1 SA
Product Code: SWM 1 SA



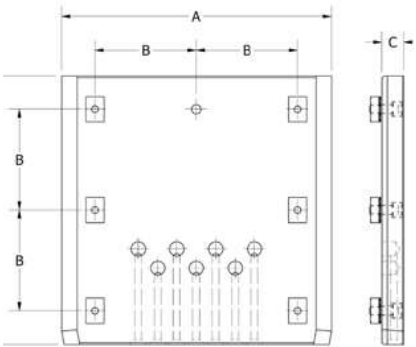
SWM 2 SA
Product Code: SWM 2 SA



SWM 3 SA
Product Code: SWM 3 SA



SEMI-AUTOMATIC QUICK CHANGE MOUNTING PLATES



- Automatically couples air and vacuum lines.
- Prevents mixing up of air and vacuum lines during tool changes.
- Must be used with a SWM SA Quick Change Chuck.

| | A | B | C | Port | # of Ports | SWM Chuck | Weight (g) | Plab No. |
|-----------------|-----|-----|----|--------|------------|-----------|------------|----------|
| GPM 1 SA | 100 | 70 | 19 | M5 | 7 | SWM 1 SA | 475 | 0214332 |
| GPM 2 SA | 160 | 60 | 13 | G 1/8" | 7 | SWM 2 SA | 850 | 0214334 |
| GPM 3 SA | 250 | 100 | 13 | G 1/8" | 10 | SWM 3 SA | 2045.8 | 0214338 |

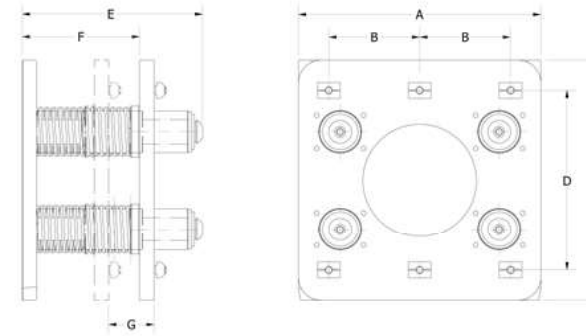
GPM 1 SA
Product Code: GPM 1 SA

GPM 2 SA
Product Code: GPM 2 SA

GPM 3 SA
Product Code: GPM 3 SA



SPRING LOADED QUICK CHANGE MOUNTING PLATES



- Allows for a spring loaded compliance on our standard GPM mounting plate.
- Especially useful in high speed ejection strokes and safety releases.

| | A | B | C | D | E | F | G (Stroke) | SWM Chuck | Profile | Weight (g) | Plab No. |
|--------------|-----|-----|-----|-----|-----|----|------------|-----------|---------|------------|----------|
| GPG 1 | 100 | 35 | 102 | 70 | 91 | 66 | 20 | SWM 1 | 1/X | 601 | 0214325 |
| GPG 2 | 160 | 60 | 160 | 120 | 115 | 84 | 30 | SWM 2 | X | 253 | 0214326 |
| GPG 3 | 250 | 100 | 254 | 200 | 115 | 84 | 30 | SWM 3 | X | 2268 | 0214327 |

GPG 1
Product Code: GPG 1

GPG 2
Product Code: GPG 2



GPG 3
Product Code: GPG 3

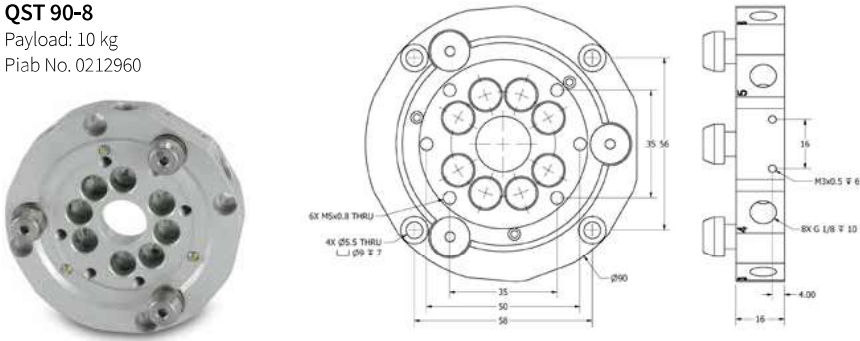


MANUAL QUICK CHANGE CHUCK - TOOL SIDE

- Semi-Automatic Tool Changer for accurate, repeatable mounting of Robotic End-of-Arm Tooling.
- Couples air and vacuum lines automatically.
- Made of lightweight aluminum with durable steel locators.

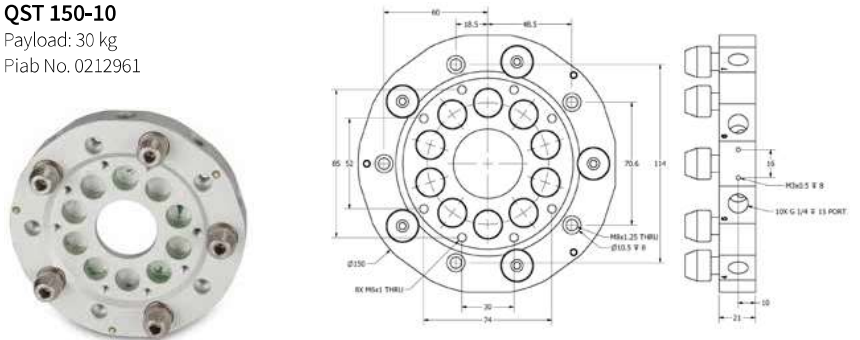
QST 90-8

Payload: 10 kg
Piab No. 0212960



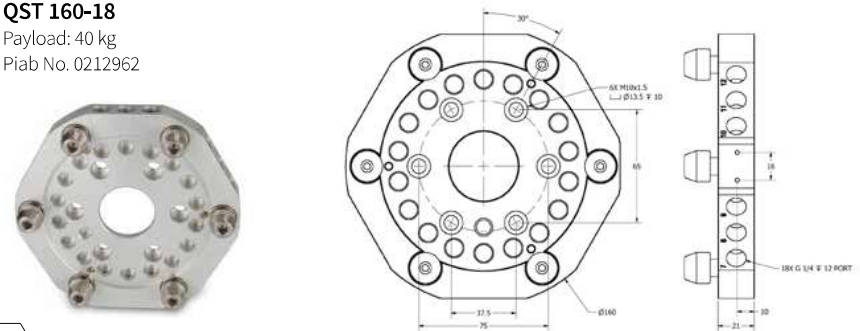
QST 150-10

Payload: 30 kg
Piab No. 0212961



QST 160-18

Payload: 40 kg
Piab No. 0212962

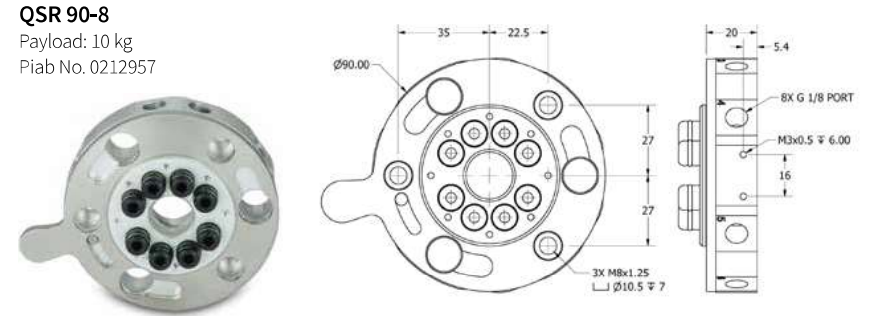


SEMI-AUTOMATIC TOOL CHANGER - ROBOT SIDE

- Semi-Automatic Tool Changer for accurate, repeatable mounting of Robotic End-of-Arm Tooling.
- Couples air and vacuum lines automatically.
- Made of lightweight aluminum with durable steel lock ring.

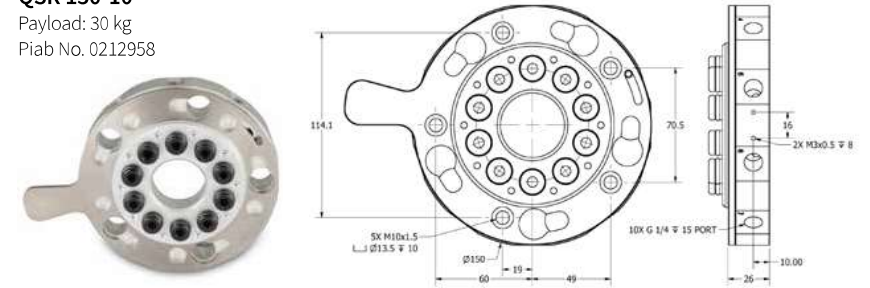
QSR 90-8

Payload: 10 kg
Piab No. 0212957



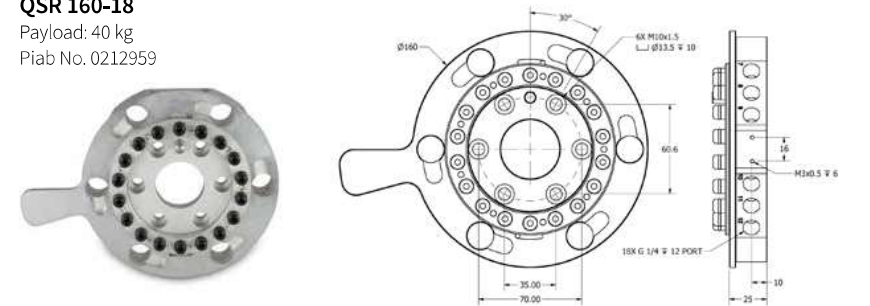
QSR 150-10

Payload: 30 kg
Piab No. 0212958

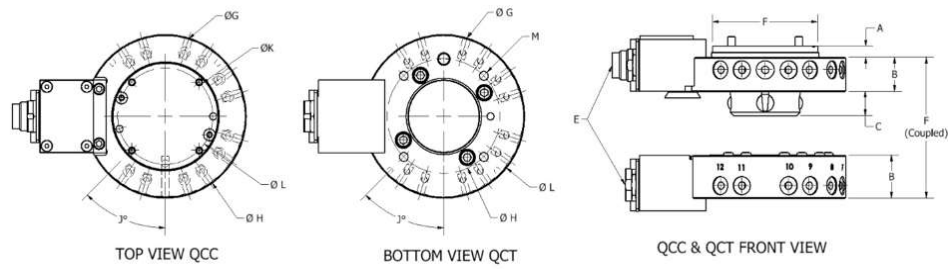


QSR 160-18

Payload: 40 kg
Piab No. 0212959



HANDS FREE QUICK CHANGE CHUCKS - ROBOT SIDE



- Used in automatic robotic tool change application.
- Integrated pneumatic and electrical connections.
- Master plate and tool plate sold separately.
- Size 2 and 3 include electrical connectors.

| | A | B | C | D | E (Electrical) | F (Coupled) | G (#) | H (Bolt Circle) | J | K | L | M | Payload | Piab No. |
|--------------|---|----|----|----|----------------|-------------|------------|-----------------|----|-----|-----|---|---------|----------|
| QCC 0 | 5 | 18 | 19 | 33 | 10-Pin | 49 | M5 (6) | 40 | 45 | 3.5 | 49 | - | 8kg | 0214574 |
| QCC 1 | 3 | 16 | 13 | 45 | 10-Pin | 39 | M5 (6) | 40 | 45 | 3.5 | 50 | - | 16kg | 0214575 |
| QCC 2 | 3 | 19 | 14 | 60 | 19-Pin | 45 | M5 (12) | 53 | 45 | 4.5 | 90 | - | 25kg | 0214576 |
| QCC 3 | 3 | 27 | 18 | 80 | 19-Pin | 57 | 1/8NPT (8) | 65 | 30 | 5.5 | 115 | - | 50kg | 0214577 |

QCC 0

Payload: 8 kg



QCC 1

Payload: 16 kg



QCC 2

Payload: 25 kg

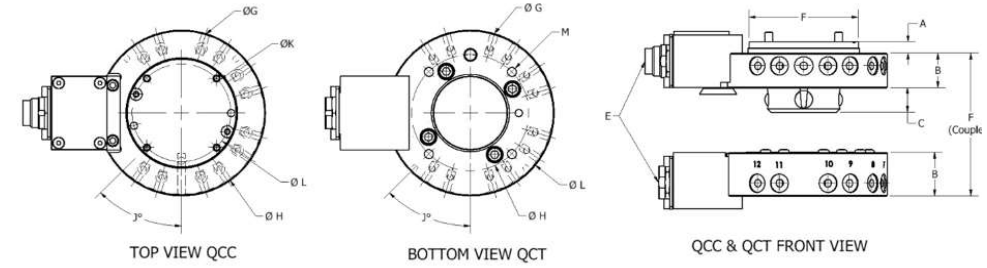


QCC 3

Payload: 50 kg



HANDS FREE QUICK CHANGE CHUCKS - TOOL SIDE



- Used in automatic robotic tool change application.
- Integrated pneumatic and electrical connections.
- Master plate and tool plate sold separately.
- Size 2 and 3 include electrical connectors.

| | A | B | C | D | E (Electrical) | F (Coupled) | G (#) | H (Bolt Circle) | J | K | L | M | Payload | Piab No. |
|--------------|---|----|---|---|----------------|-------------|------------|-----------------|----|---|-----|-----------|---------|----------|
| QCT 0 | - | 26 | - | - | 10-Pin | 49 | M5 (6) | 40 | 45 | - | 49 | M5 x .8 | 8kg | 0214581 |
| QCT 1 | - | 21 | - | - | 10-Pin | 39 | M5 (6) | 40 | 45 | - | 50 | M5 x .8 | 16kg | 0214582 |
| QCT 2 | - | 24 | - | - | 19-Pin | 45 | M5 (12) | 63 | 45 | - | 90 | M6 x 1 | 25kg | 0214583 |
| QCT 3 | - | 27 | - | - | 19-Pin | 57 | 1/8NPT (8) | 80 | 30 | - | 115 | M8 x 1.25 | 50kg | 0214584 |

QCT 0

Payload: 8 kg



QCT 1

Payload: 16 kg



QCT 2

Payload: 25 kg

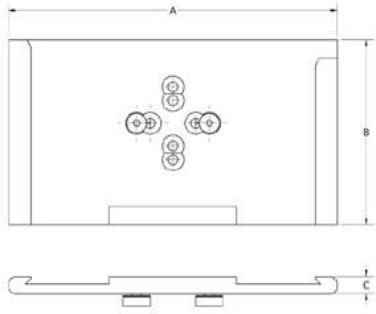


QCT 3

Payload: 50 kg



WALL MOUNTS



- Economical storage of EOAT when not in production.
- Accepts EOAT built on our standard GPM mounting plates as well as our GPG Spring Loaded and new GPM-SA Semi-Automatic mounting plates.

| | A | B | C | Storage For | Profile | Weight (g) | Plab No. |
|--------------|-----|-----|----|------------------|---------|------------|----------|
| GHV 0 | 80 | 63 | 10 | All GPM 0 Plates | L/X | 94.6 | 0214324 |
| GHV 1 | 120 | 76 | 10 | All GPM 1 Plates | L/X | 147.1 | 0212948 |
| GHV 2 | 180 | 102 | 10 | All GPM 2 Plates | X/IX/HX | 297.1 | 0212949 |
| GHV 3 | 270 | 152 | 13 | All GPM 3 Plates | X/IX/HX | 817.1 | 0212950 |

GHV 0

Product Code: GHV 0



GHV 1

Product Code: GHV 1



GHV 2

Product Code: GHV 2

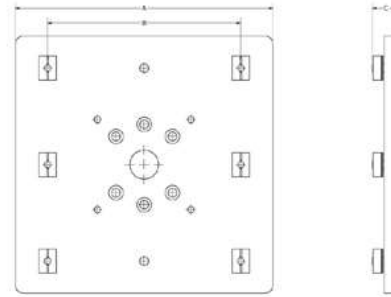


GHV 3

Product Code: GHV 3



MOUNTING PLATES



- Mounts profile straight up to the QST 90.

| | A | B | C | Weight (g) | Plab No. |
|-----------------|-----|-----|----|------------|----------|
| QMP 1-90 | 100 | 70 | 15 | 240 | 0212963 |
| QMP 2-90 | 160 | 120 | 17 | 723.9 | 0212964 |

- Mounts profile straight up to the 150 and 160 QST.

| | A | B | C | Weight (g) | Plab No. |
|----------------------|-----|-----|----|------------|----------|
| QMP 2-150-160 | 160 | 120 | 17 | 668.7 | 0212965 |
| QMP 3-150-160 | 250 | 200 | 17 | 1620 | 0212966 |

QMP 1-90

Product Code: QMP 1-90



QMP 2-90

Product Code: QMP 2-90



QMP 2-150-160

Product Code: QMP 2-150-160

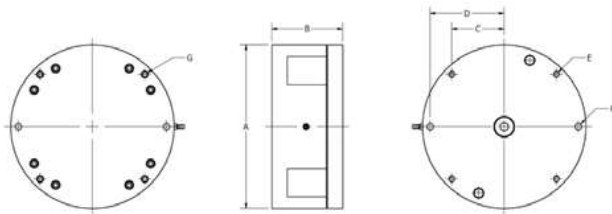


QMP 3-150-160

Product Code: QMP 3-150-160



TOOL ALIGNMENT DEVICE

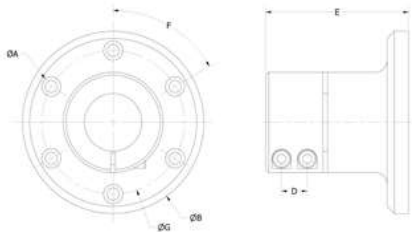


- Allows tools to shift for proper alignment with parts.
- Use with locator pins or bushings to align tools with molds or other machines.
- After aligned the compensator can be locked in place for proper part placement.

| | A | B | C | D | E (Tap) | F (Slip Fit) | Lateral Misalignment (mm) | Rotary Misalignment | Max Payload (kg) | Payload @ 4.1 Bar (kg) | Torsion Resistance (N*m) | Piab No. |
|--------------|-----|----|----|----|---------|--------------|---------------------------|---------------------|------------------|------------------------|--------------------------|----------|
| TAD 0 | 76 | 30 | 23 | 33 | #8-32 | 3/16" | +/- 2.5 | +/- 5 | 18.6 | 8.5 | 11.8 | 0214704 |
| TAD 1 | 102 | 41 | 31 | 45 | #10-32 | 1/4" | +/- 2.5 | +/- 5 | 33.6 | 15.3 | 30.7 | 0214705 |
| TAD 2 | 133 | 51 | 42 | 59 | 1/4-20 | 1/4" | +/- 2.5 | +/- 5 | 44.7 | 20.3 | 51.7 | 0214706 |
| TAD 3 | 203 | 88 | 65 | 92 | 5/16-18 | 3/8" | +/- 2.5 | +/- 5 | 99.2 | 45.1 | 157.6 | 0214707 |



QUICK CHANGE INTERFACE

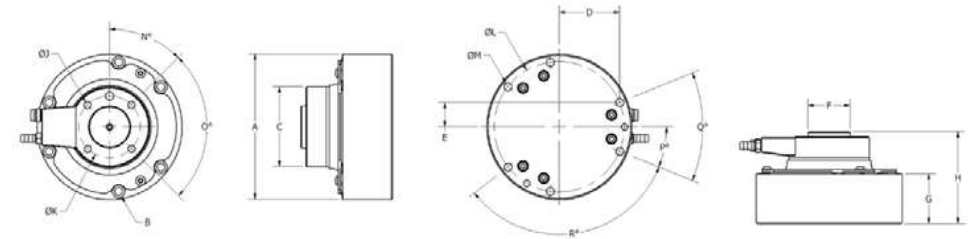


- Quick change interface for boom mounting D-Profile.
- Allows for end or boom mounting commonly utilized with 5 or 6 axis robots.

| | A | B | D | E | F | G | Profile | Piab No. |
|------------------|-------|-----|----|-----|----|-----|---------|----------|
| QCI 30 T | 1 1/8 | 127 | - | 100 | 60 | 100 | T-30 | 0214578 |
| QCI 40 T | 1 1/8 | 127 | 18 | 100 | 60 | 100 | HX-40 | 0214579 |
| QCI HX-60 | 1 1/8 | 140 | 63 | 100 | 60 | 118 | HX-60 | 0214580 |



COLLISION SENSORS



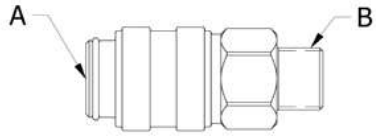
- The TCS is a mechanical collision sensor that utilizes pneumatics for dynamic variability.
- Detects when the robot arm has encountered an obstruction.
- Absorbs the crash energy.
- Stops the robot to prevent costly damage to the robot arm and tooling.
- Features a repeatability of 0.0005" and allows the user to adjust the amount of resistance the unit must overcome before stopping the system.

| | A | B (C bore) | C | D | E | F | G | J | K | L | M (Slip Fit) | N | O | P | Q | R | Piab No. |
|--------------|-----|------------|-----|-----|----|----|-----|-----|-----|-----|--------------|----|------|----|----|-----|----------|
| TCS-0 | 86 | M4 | 48 | 36 | 15 | 31 | 52 | M5 | 37 | 77 | 4 | 45 | 4x90 | 22 | 44 | 120 | 0214710 |
| TCS-1 | 114 | M5 | 63 | 48 | 19 | 40 | 64 | M6 | 50 | 103 | 6 | 45 | 4x90 | 21 | 42 | 120 | 0214711 |
| TCS-2 | 150 | M6 | 85 | 64 | 25 | 51 | 79 | M6 | 63 | 137 | 6 | 60 | 6x60 | 21 | 42 | 120 | 0214712 |
| TCS-3 | 203 | M8 | 117 | 86 | 33 | 71 | 105 | M10 | 90 | 184 | 10 | 45 | 4x90 | 21 | 42 | 120 | 0214713 |
| TCS-4 | 278 | M10 | 163 | 120 | 46 | 99 | 143 | M10 | 125 | 257 | 10 | 60 | 6x60 | 21 | 42 | 120 | 0214714 |

| | |
|---|-------------------------|
| Moment Resistance ¹ Variable from 10 to 90 psi (0.68 to 6.2 bar) | 29-274 in-lb, 3-31 Nm |
| Torque Resistance ¹ Variable from 10 to 90 psi (0.68 to 6.2 bar) | 56-362 in-lb, 6-41 Nm |
| Force Resistance ¹ Variable from 10 to 90 psi (0.68 to 6.2 bar) | 25-229 lbf, 111-1,019 N |
| Angular Compliance | ±8 deg (0.14 rad) |
| Rotary Compliance | ±24 deg (0.42 rad) |
| Axial Compliance Compression | 0.31 in, 7.9 mm |
| Repeatability (x, y & z) Measured at center and O.D. of tool plate | ±0.0005 in, ±0.0127 mm |
| Repeatability (about z axis) Measured at center and O.D. of tool plate | ±0.017 deg |
| Mass | 1 lb (0.45 kg) |
| Height | 2.03 in (51.6 mm) |



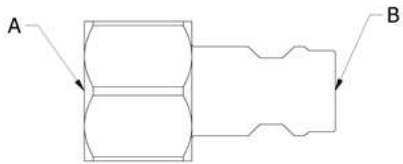
QUICK RELEASE COUPLING



- Quick release couplings for faster tool changes.
 - Replacement couplings for SWM series Quick Change Mounting Chucks.
- * Sold individually.

| | A (Female Thread) | B (Series) | Weight (g) | Piab No. |
|----------------|-------------------|------------|------------|----------|
| 92-5002 | M5 x .8 | 20 | 8 | 0212954 |
| 92-0204 | R 1/8" | 21 | 27 | 0212955 |
| 92-0406 | R 1/4" | 26 | 73 | 0212956 |

QUICK RELEASE PLUGS



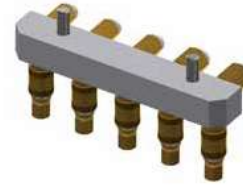
- Quick Release plugs for fast tool changes.
 - EOAT plugs for mating SWM couplings.
- * Sold in Packs of 10

| | A (Female Thread) | B (Series) | Weight (g) | Piab No. |
|-------------------|-------------------|------------|------------|----------|
| 94-4902-10 | M5 x .8 | 20 | 26 | 0212951 |
| 94-0104-10 | G 1/8" | 21 | 143 | 0212952 |
| 94-0306-10 | G 1/4" | 26 | 246 | 0212953 |

HANDLES & LEVERS

SWM 1 MANIFOLD

Product Code: SWM 1 Manifold
Piab No. 0214631



SWM 1 LEVER

Product Code: SWM 1 Lever
Piab No. 0214633



SWM 1 HANDLE

Product Code: SWM 1 Handle
Piab No. 0214631



SWM 2 MANIFOLD

Product Code: SWM 2 Manifold
Piab No. 0214638



SWM 2 LEVER

Product Code: SWM 2 Lever
Piab No. 0214639



SWM 2 HANDLE

Product Code: SWM 2 Handle
Piab No. 0214636



SWM 3 MANIFOLD

Product Code: SWM 3 Manifold
Piab No. 0214644



SWM 3 LEVER

Product Code: SWM 3 Lever
Piab No. 0214645

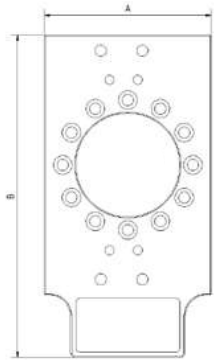


SWM 3 HANDLE

Product Code: SWM 3 Handle
Piab No. 0214642



ADAPTER PLATE



- Drilled holes for quick change systyem.
- 250mm x 160mm and one bold circle of 125mm.

| | A | B | Depth | Plab No. |
|---------------------------|-----|-----|-------|----------|
| AP-250x160LK125SWA | 160 | 305 | 20 | 0213367 |

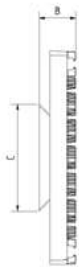
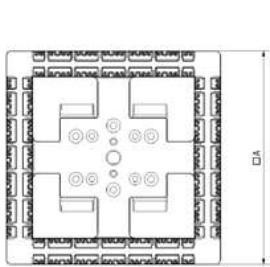


LIGHT WEIGHT MOUNTING PLATE



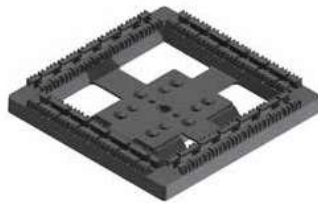
- Made from high strength light weight polymer
- Dovetail guide 100 mm
- Weight 333 grams
- Compatible with Piab modular gripper system

LIGHTWEIGHT FLEXIBLE MOUNTING PLATE

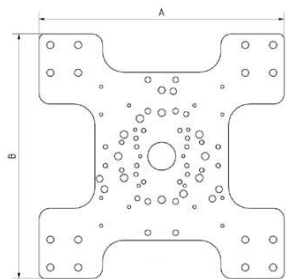


- Series polymer lightline.

| | A | B | Depth | Plab No. |
|----------------------|-----|-----|-------|----------|
| HA-SSW100-200 | 200 | 200 | 34 | 0216332 |



UNIVERSAL ADAPTER PLATE



- Drilled holes for quick change systyem.
- 250mm x 160mm and one bold circle of 125mm.

| | A | B | Depth | Plab No. |
|-----------------------|-----|-----|-------|----------|
| AP-352x352-UNI | 352 | 352 | 15 | 0 |

