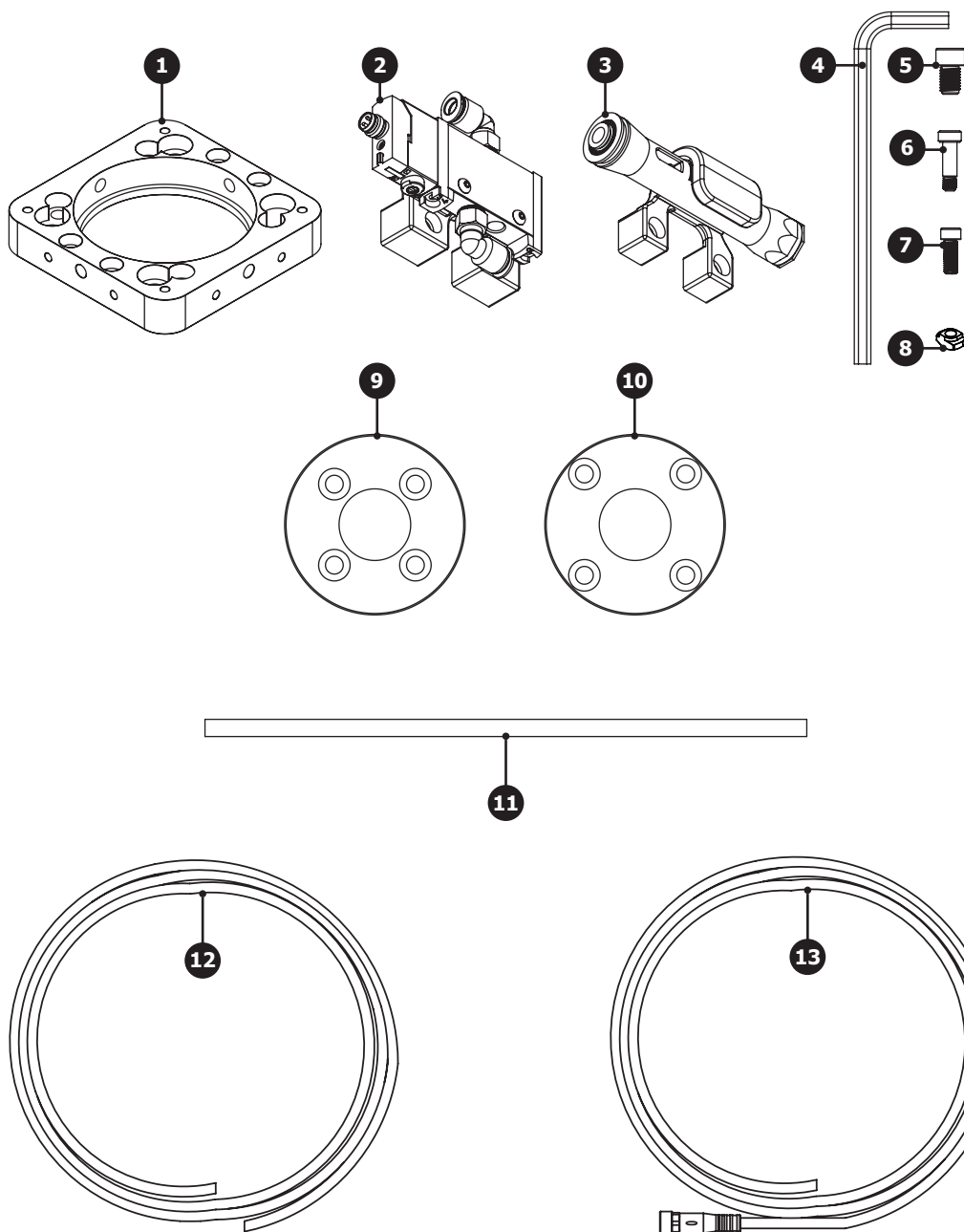


# Active Vacuum Array Gripper Kit

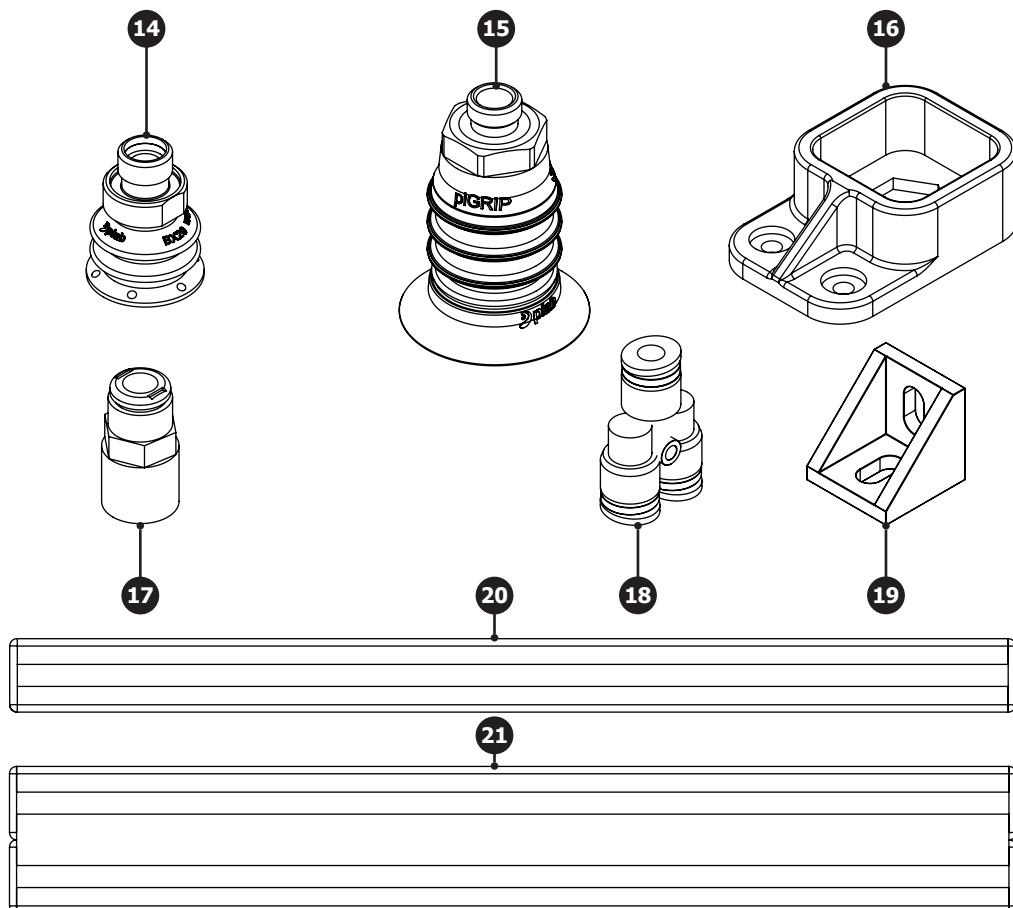
## Getting Started Guide

Active Vacuum Array Gripper Kit

## Box Contents



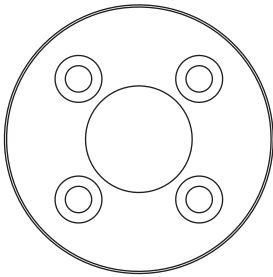
## Box Contents



- |   |   |
|---|---|
| <b>1.</b> Universal Tool Plate                | <b>12.</b> Solenoid Pneumatic Tubing    |
| <b>2.</b> Solenoid & Mounting Bracket         | <b>13.</b> Solenoid Cable               |
| <b>3.</b> Vacuum Generator & Mounting Bracket | <b>14.</b> 4x25mm Suction Cups          |
| <b>4.</b> 3x Allen Keys                       | <b>15.</b> 4x36mm Bag Lip Suction Cups  |
| <b>5.</b> 4x M6 Bolts                         | <b>16.</b> 4x Cup Mounts                |
| <b>6.</b> 4x Shoulder Bolts                   | <b>17.</b> 4x Cup Fitting               |
| <b>7.</b> M4 Bolts(8x 8mm, 4x 12mm, 4x 18mm)  | <b>18.</b> 4x Tube Y-Splitters          |
| <b>8.</b> M4 T-Nuts                           | <b>19.</b> 4x 20mm Brackets             |
| <b>9.</b> ISO 40 Mounting Plate               | <b>20.</b> 2x 20x20mm 260mm Long T-Slot |
| <b>10.</b> ISO 50 Mounting Plate              | <b>21.</b> 20x40mm 260mm Long T-Slot    |
| <b>11.</b> Vacuum Generator Tube              |   |

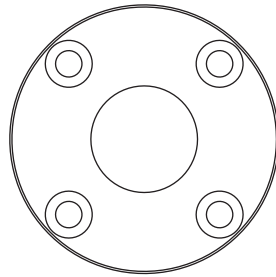
## Mounting Plate Assembly

1. Select your mounting plate and fix to the robot using M6 bolts provided.



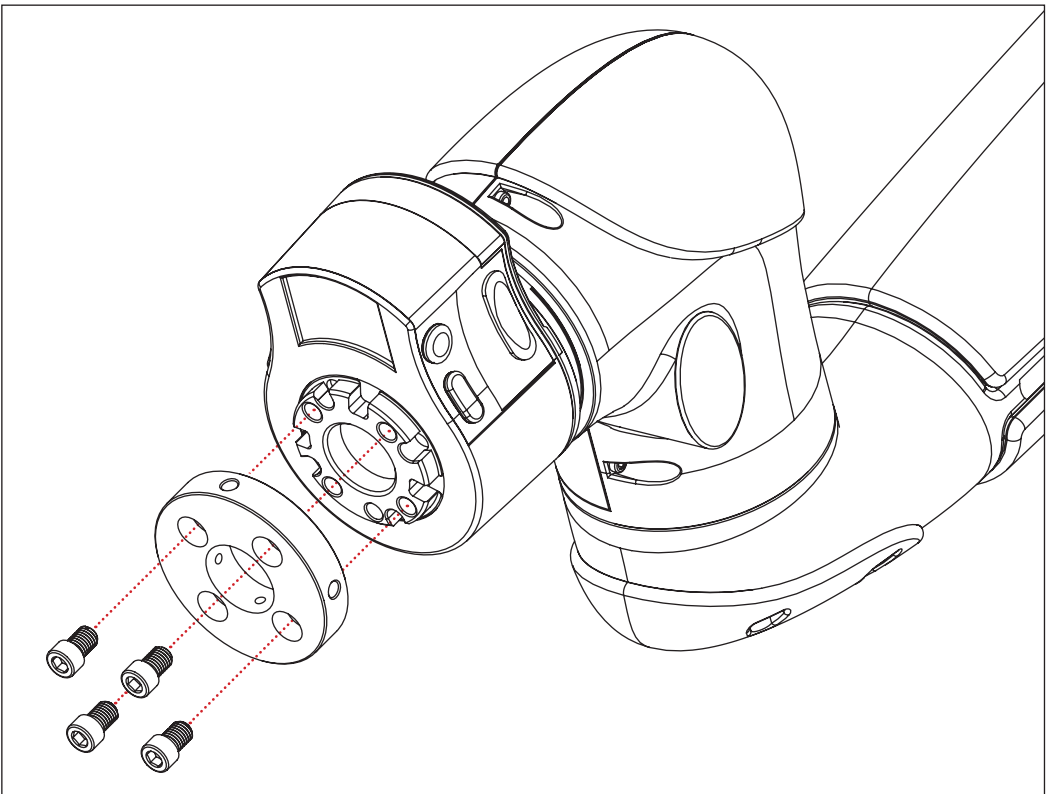
### ISO 40 Mounting Plate

Suitable for Rethink Robotics' Sawyer, ABB Robots using ISO 9409-1-40-4-M6 compatible mounting plate.



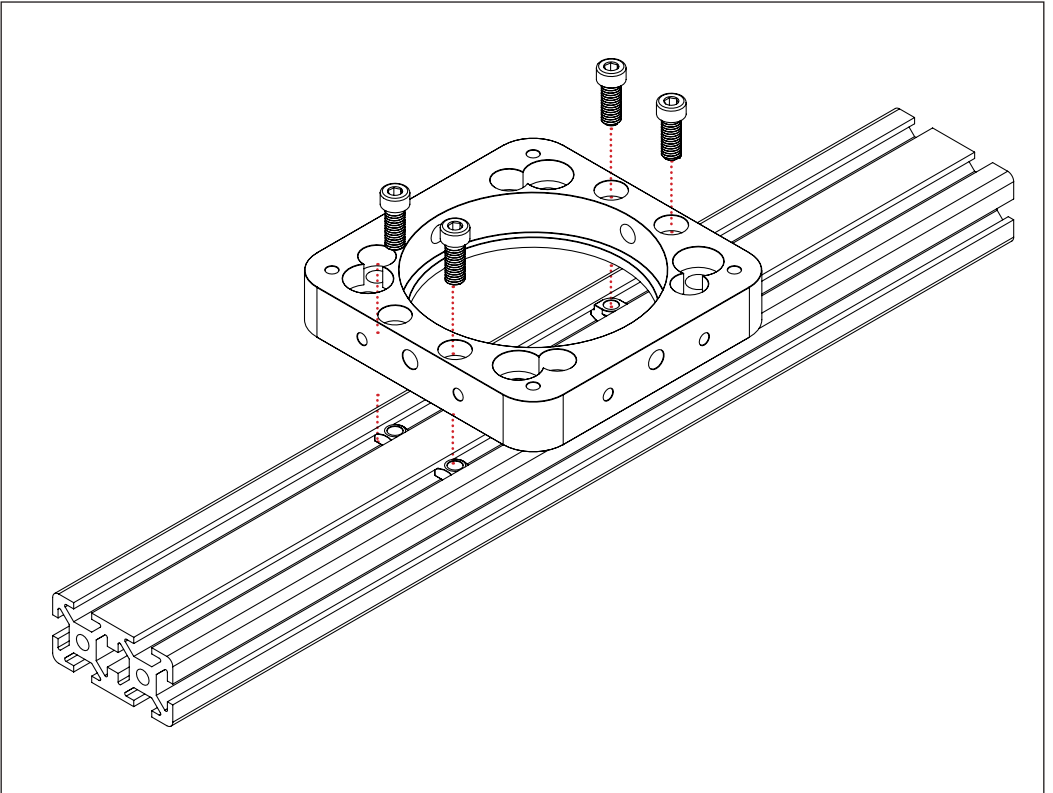
### ISO 50 Mounting Plate

Kuka iiwa, Universal Robots UR3, UR5 and UR10 using ISO 9409-1-50-4-M6 compatible mounting plate.



## Installing Universal Tool Plate

2. Attach Universal Tool Plate to T-slot profile using M4 12mm bolts and T-nuts

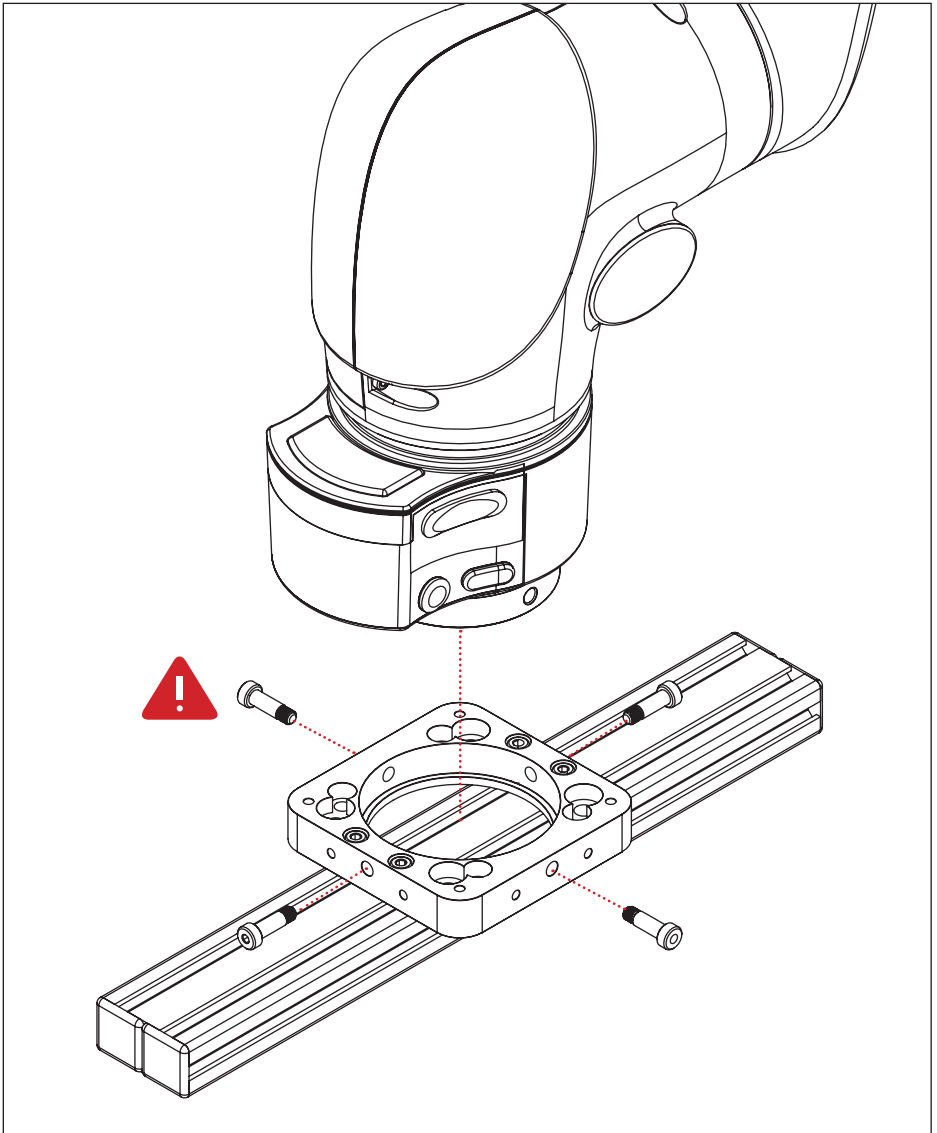


## Install Vacuum Tool

3. Attach Universal Tool Plate to the robot arm using 4x shoulder bolts.

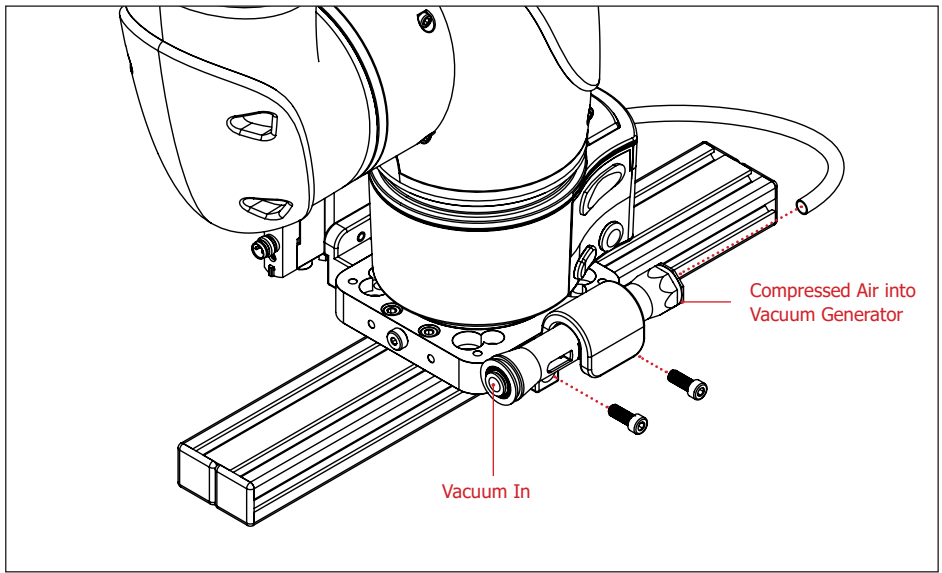


**Fit all 4x shoulder bolts loosely to align the holes before final tightening.**

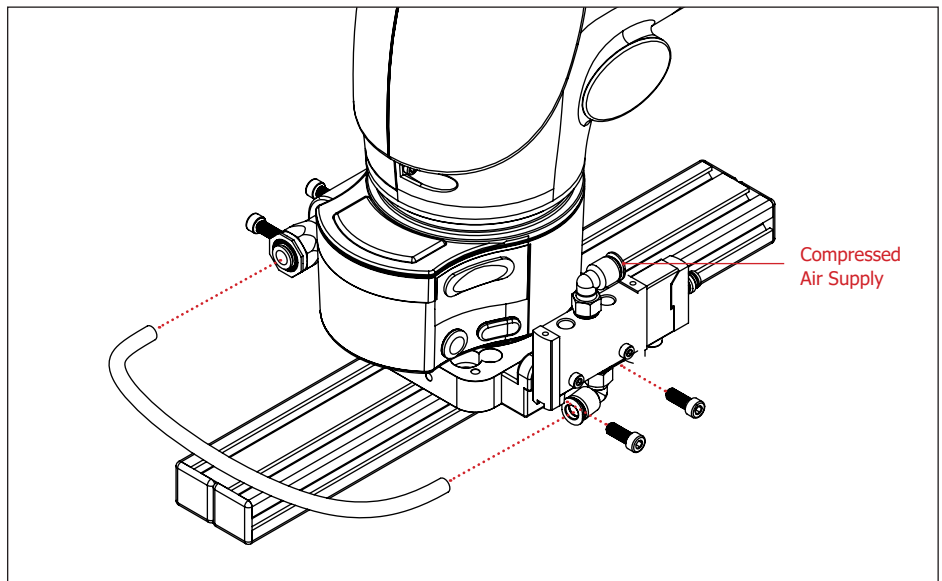


## Assemble Solenoid and Vacuum Generator

**4A.** Install the vacuum generator using 2x M4 fixing bolts.

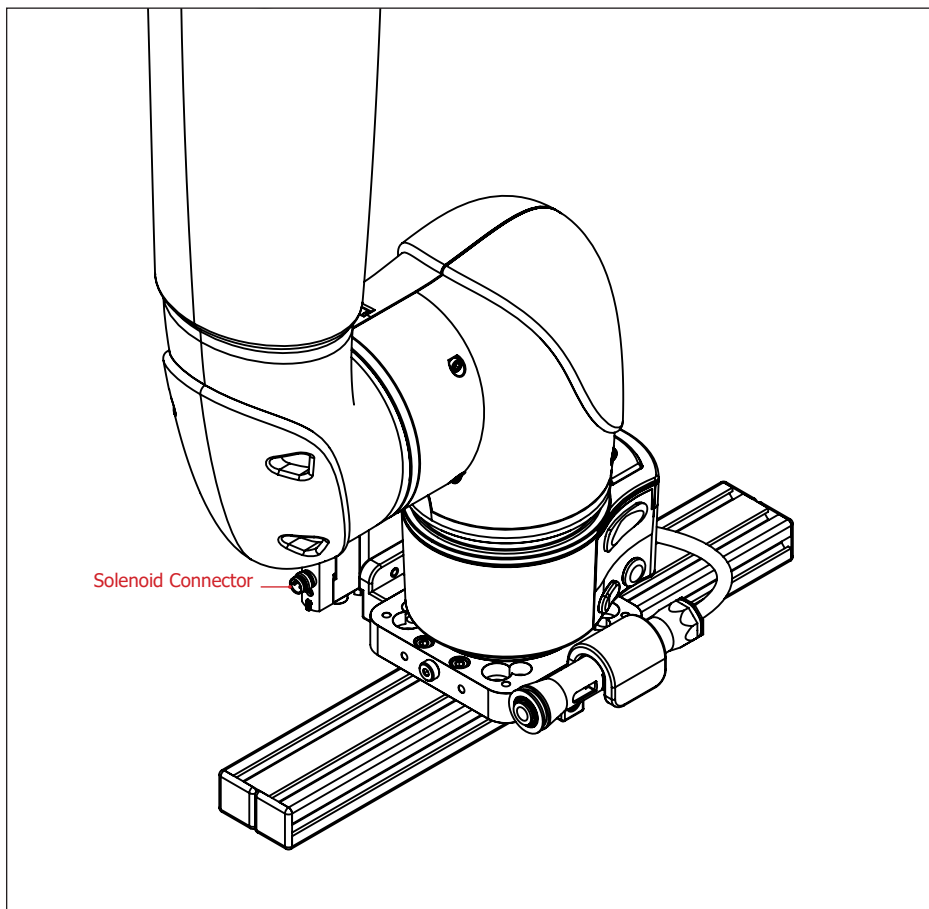


**4B.** Install the solenoid using 2x M4 fixing bolts and then assemble the piping.



## Attach the Solenoid Cable

5. Attach the solenoid cable, refer to the wiring below.



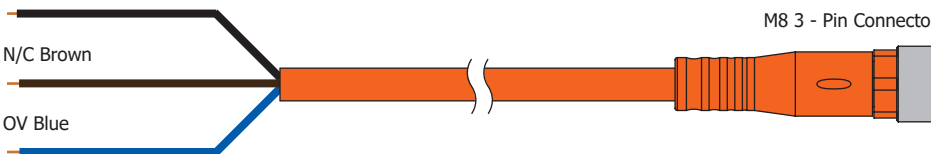
### Solenoid Cable Specification

24V Black

N/C Brown

0V Blue

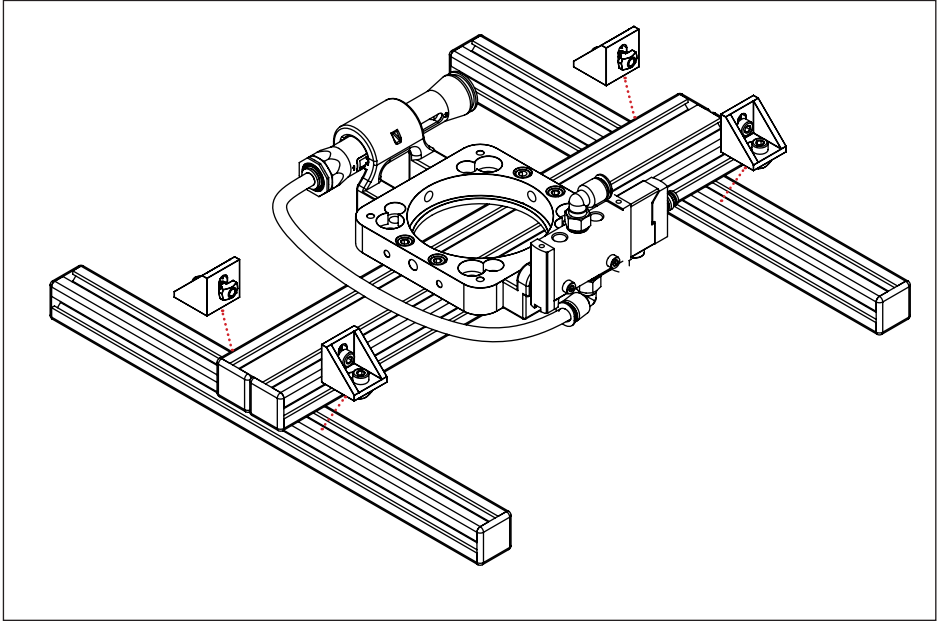
M8 3 - Pin Connector



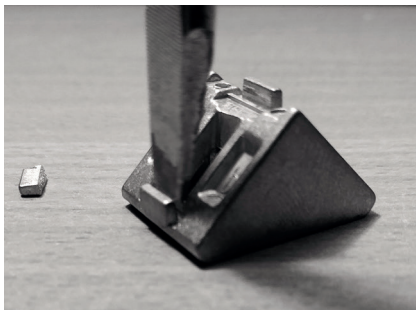


## Assemble Required Configuration

**6A.** Assemble a configuration for your requirement using additional T-slot bars with angle brackets, M4 8mm bolts and T-nuts

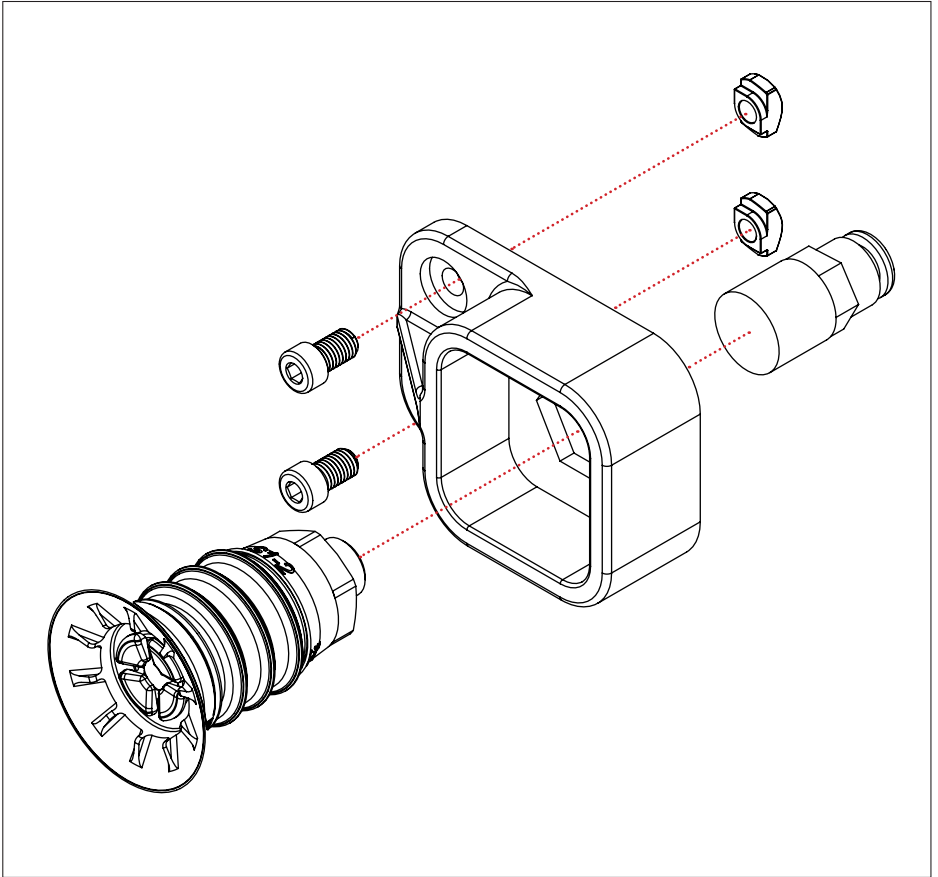


Angle bracket tabs may need to be removed to sit flush with T-slot. This can be done by prying the tabs off using a flat head screwdriver.



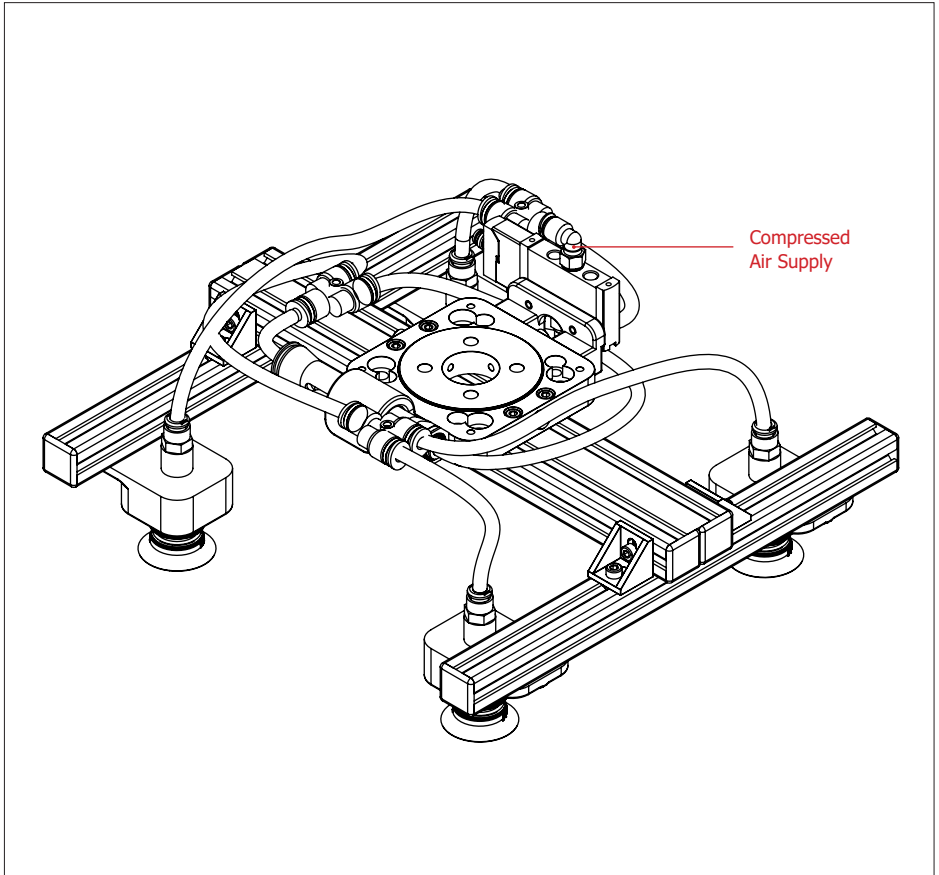
## Assemble Required Configuration

**6B.** Assemble required suction cups, cup mounts and fittings and attach the assembly to T-slot using M4 8mm bolts and T-nuts



## Assemble Piping

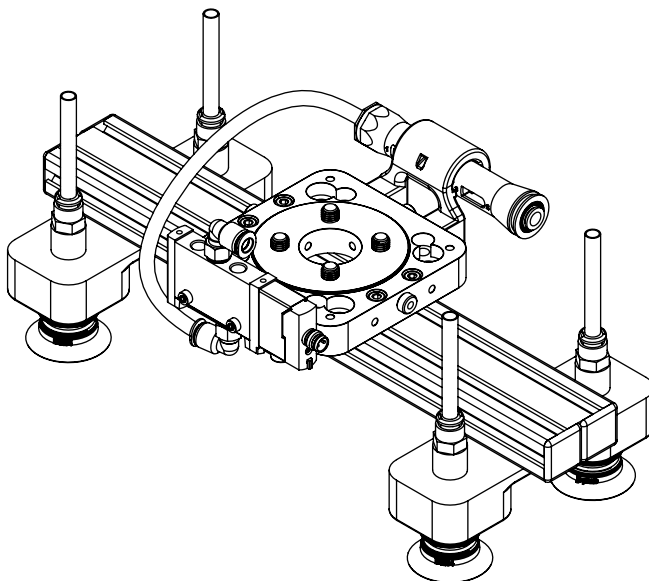
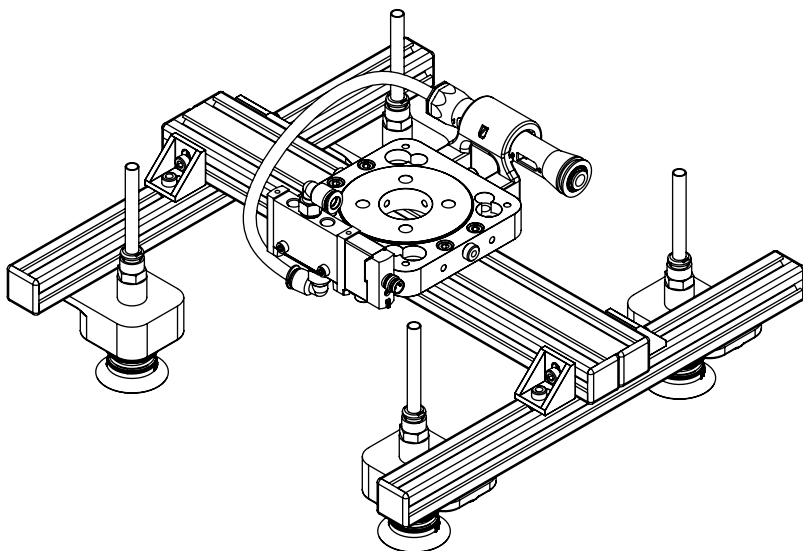
**7.** Cut the included air hose to length and connect all suction cups to vacuum generator using push-fit Y-splitters. Make sure the air hose is not kinked or rubbing.



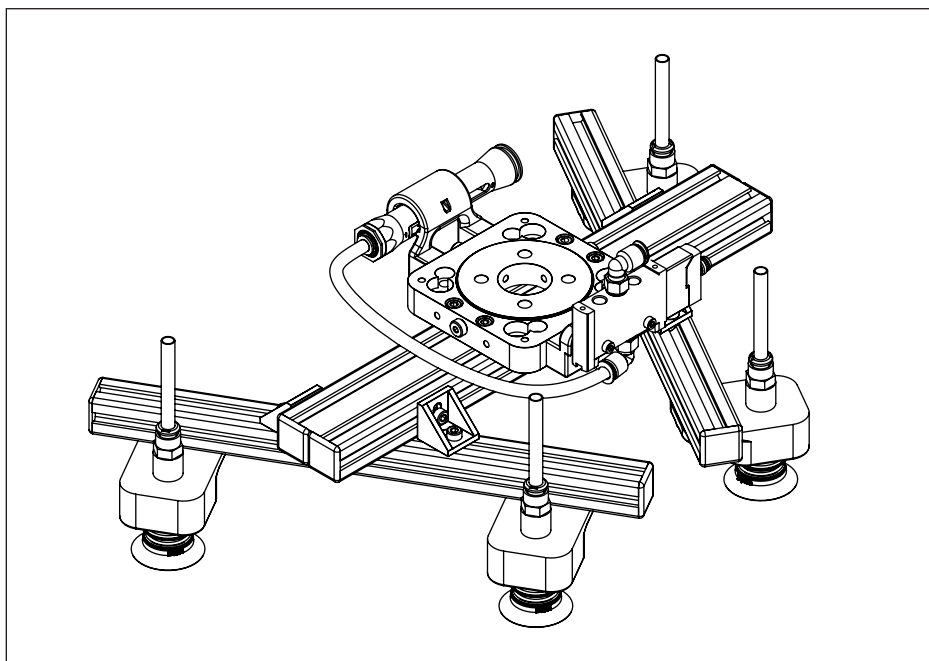
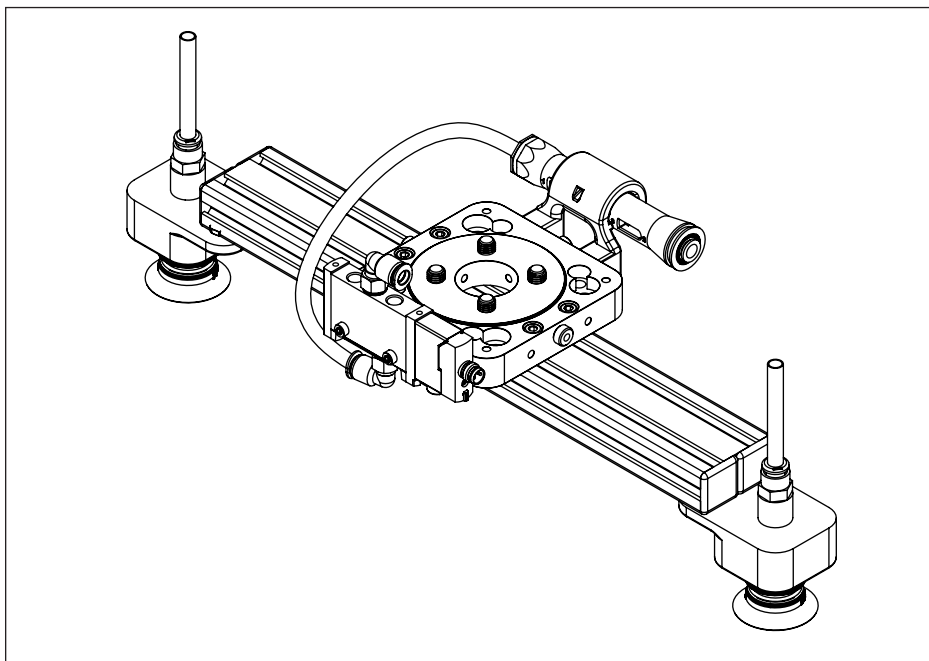
**8.** Connect the Compressed Air Supply.

## Configurations

### Active Vacuum Array Gripper Kit

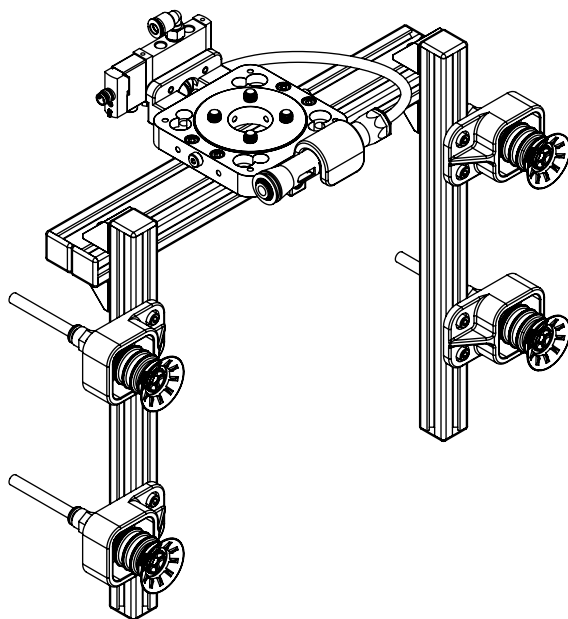
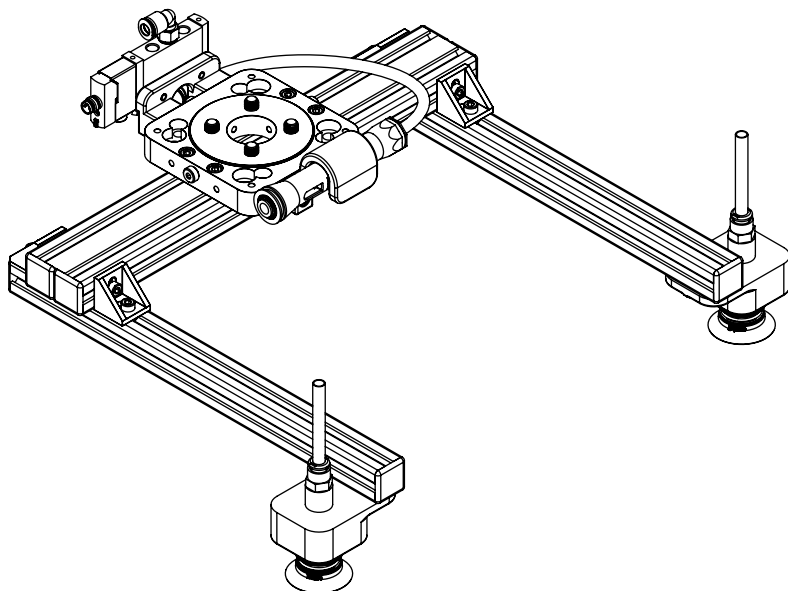


## Configurations

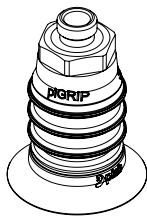


## Configurations

### Active Vacuum Array Gripper Kit



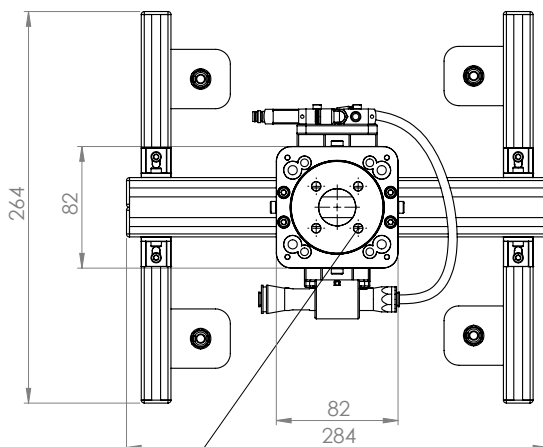
# Technical Specification



Description	Vertical		Parallel	
	40 -kPa	60 -kPa	40 -kPa	60 -kPa
Lifting forces	10.3 N	15.0 N	5.2 N	7.5 N

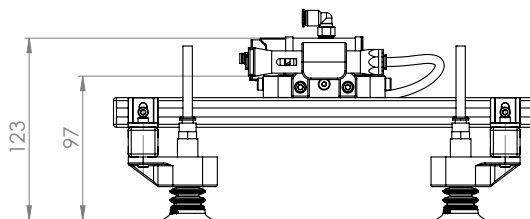


Description	Vertical			Parallel		
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa
Lifting forces	8 N	13 N	17 N	5 N	10 N	12 N



## SUPPORTED ROBOT BOLT PATTERNS

1. ISO 9409-1-40-4-M6 (40MM PCD WITH 4XM6 THREADS)
2. ISO 9409-1-50-4-M6 (50MM PCD WITH 4XM6 THREADS)



Thank you for choosing the Active Vacuum Array Gripper Kit.

This supplement provides you with information relating to the Active Vacuum Array Gripper Kit and is correct at the time of publishing.

**[www.active8robots.com](http://www.active8robots.com)**

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