PhantomX Pincher Specifications

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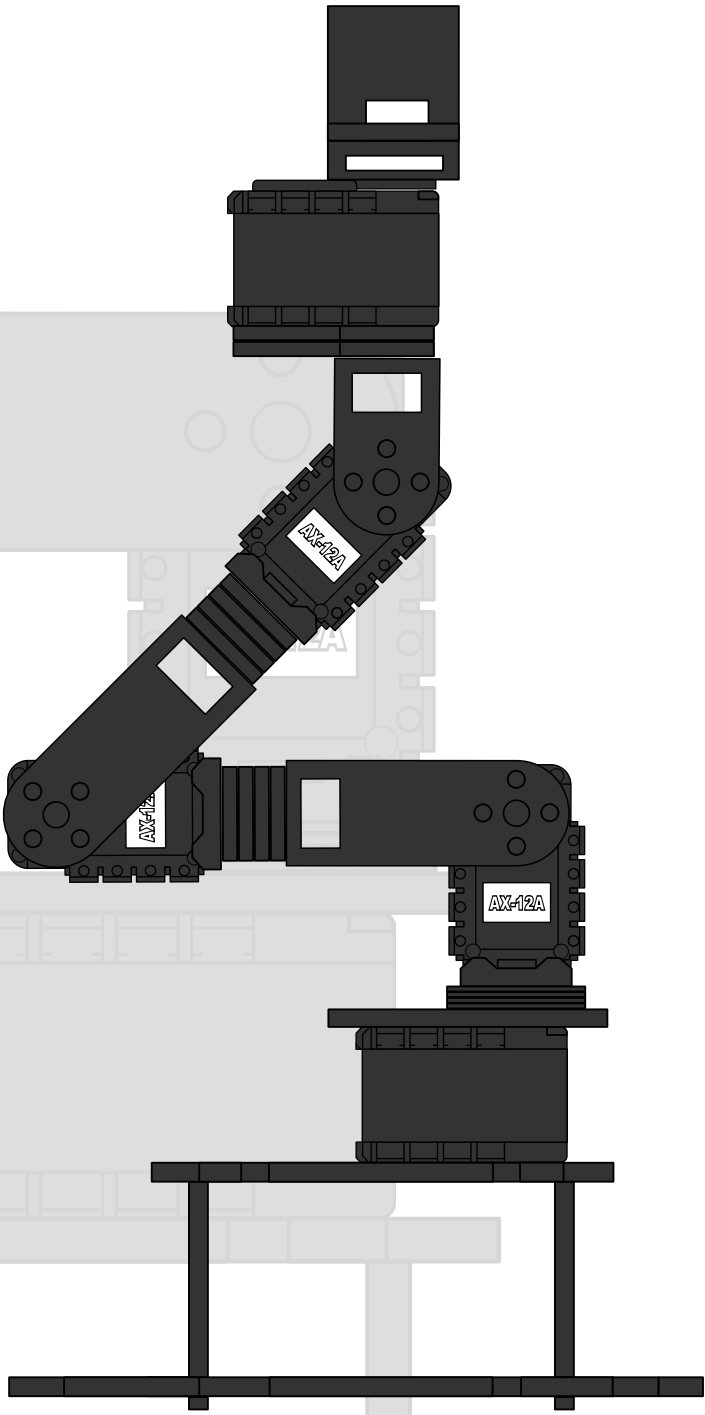
PhantomX Pincher Specifications

By Hans Toquica



The PhantomX Pincher is a 4 Degrees of Freedom Robotic Arm that is commonly used in the classroom for teaching robotics to students.

Not so much technical information can be found online for this robot, *ergo*, this document is intended to provide the robot specifications in regards to the kinematics dimensions and the workspace.

Dimensions in milimeters unless otherwise indicated.

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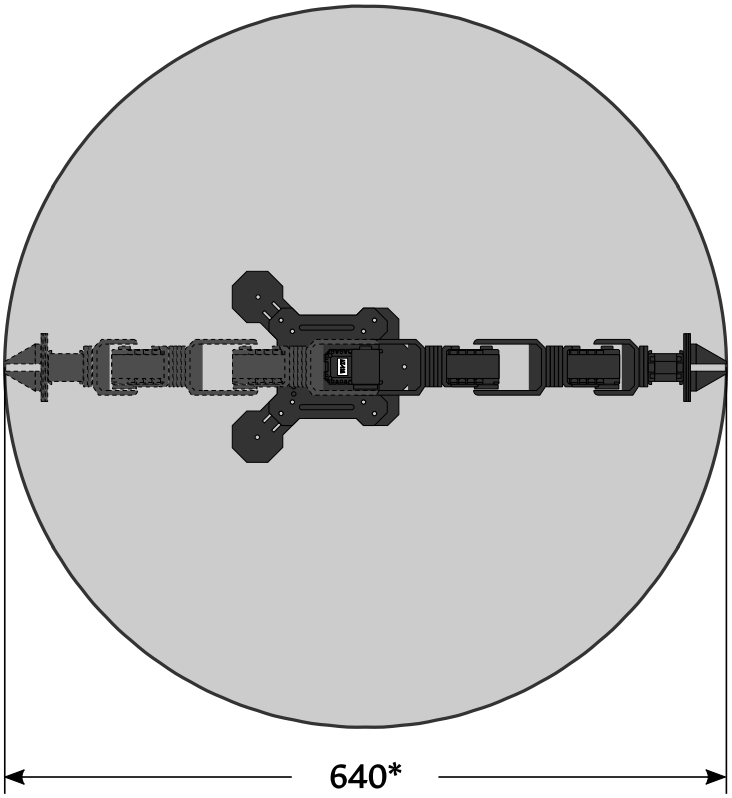
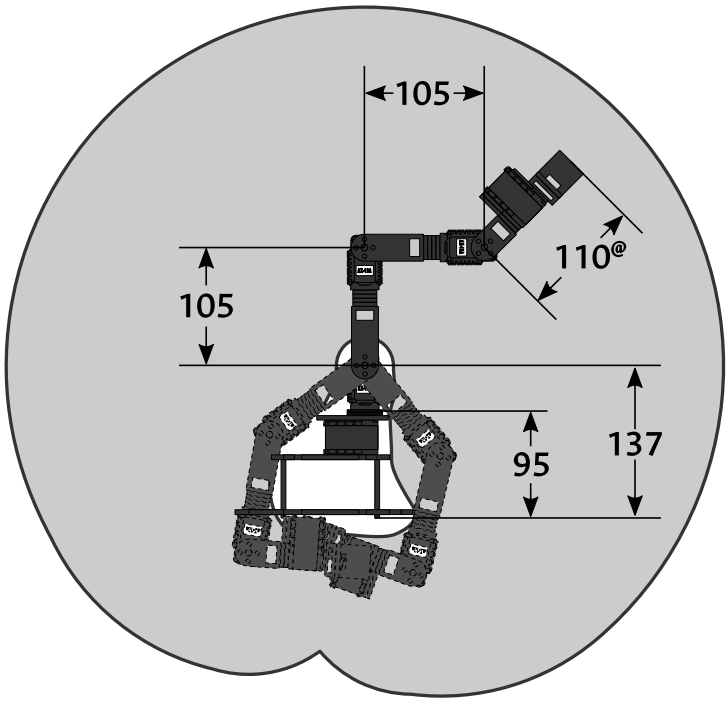
PhantomX Pincher Simplified Workspace



* Effective Grasping at 610 mm.

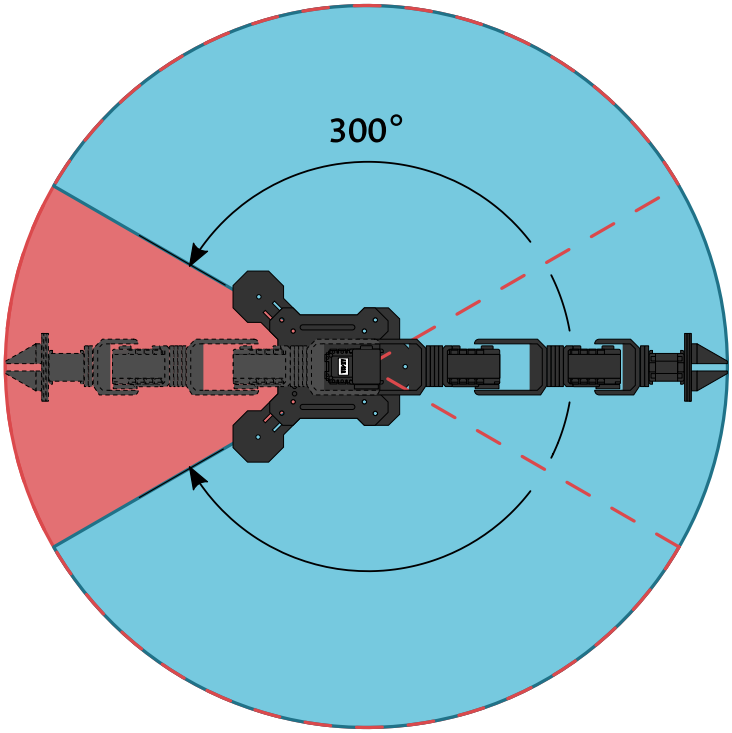
Top View



@ Effective Grasping at 95 mm.

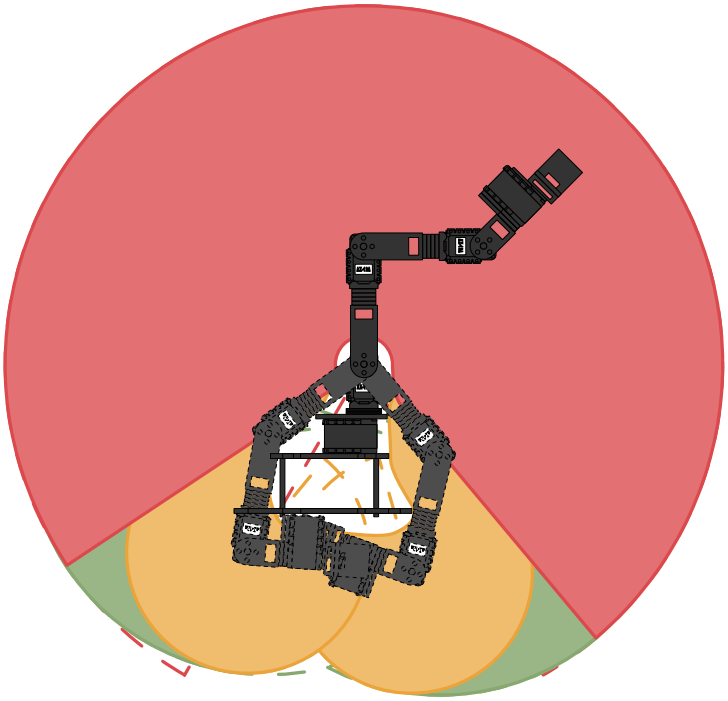
Planar View

PhantomX Pincher Extended Workspace



Top View

- Second Joint Between 0° and 150°
- Second Joint Between 150° and 300°
- Second Joint Between 150° and 300° (Superimposing First Workspace)



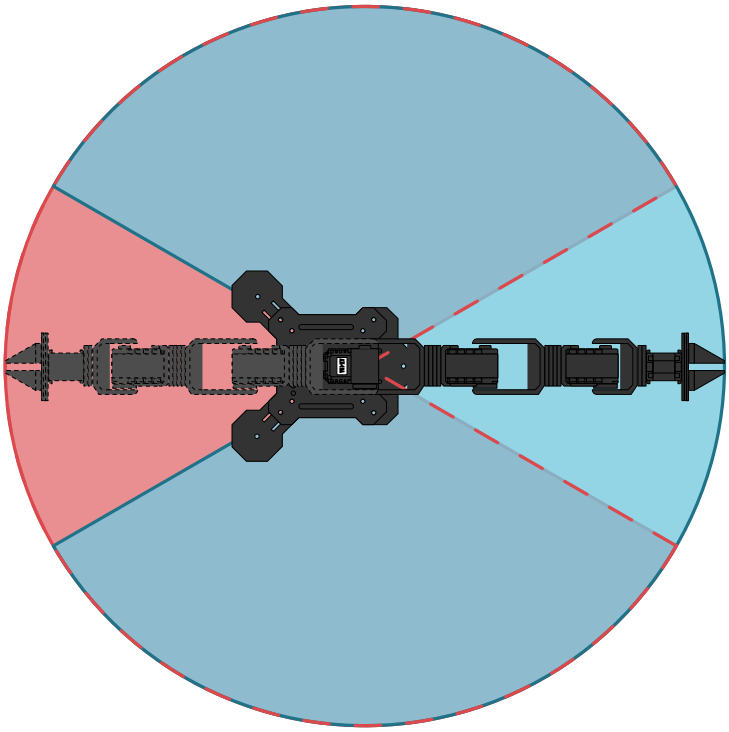
Planar View

- Due to Second Joint
- Due to Third Joint
- Due to Fourth Joint

Dashed Lines Different from Black Stand for Workspace if There Were No Obstacles

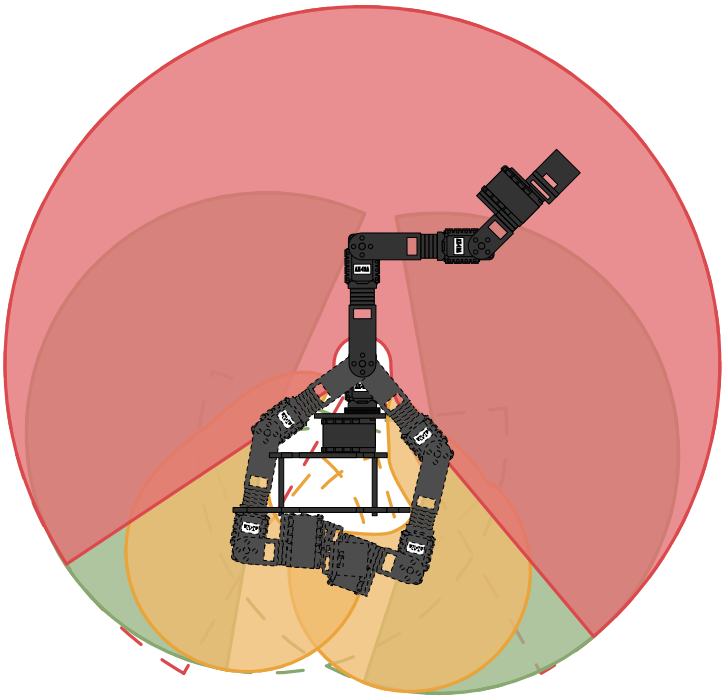
Black Dashed Lines Stand for Robot Pose in Maxed Out Joints (Ascending)

PhantomX Pincher Extended Workspace



Top View

- Second Joint Between 0° and 150°
- Second Joint Between 150° and 300°
- Second Joint Between 150° and 300° (Superimposing First Workspace)



Planar View

- Due to Second Joint
- Due to Third Joint
- Due to Fourth Joint

Dashed Lines Different from Black Stand for Workspace if There Were No Obstacles

Black Dashed Lines Stand for Robot Pose in Maxed Out Joints (Ascending)

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