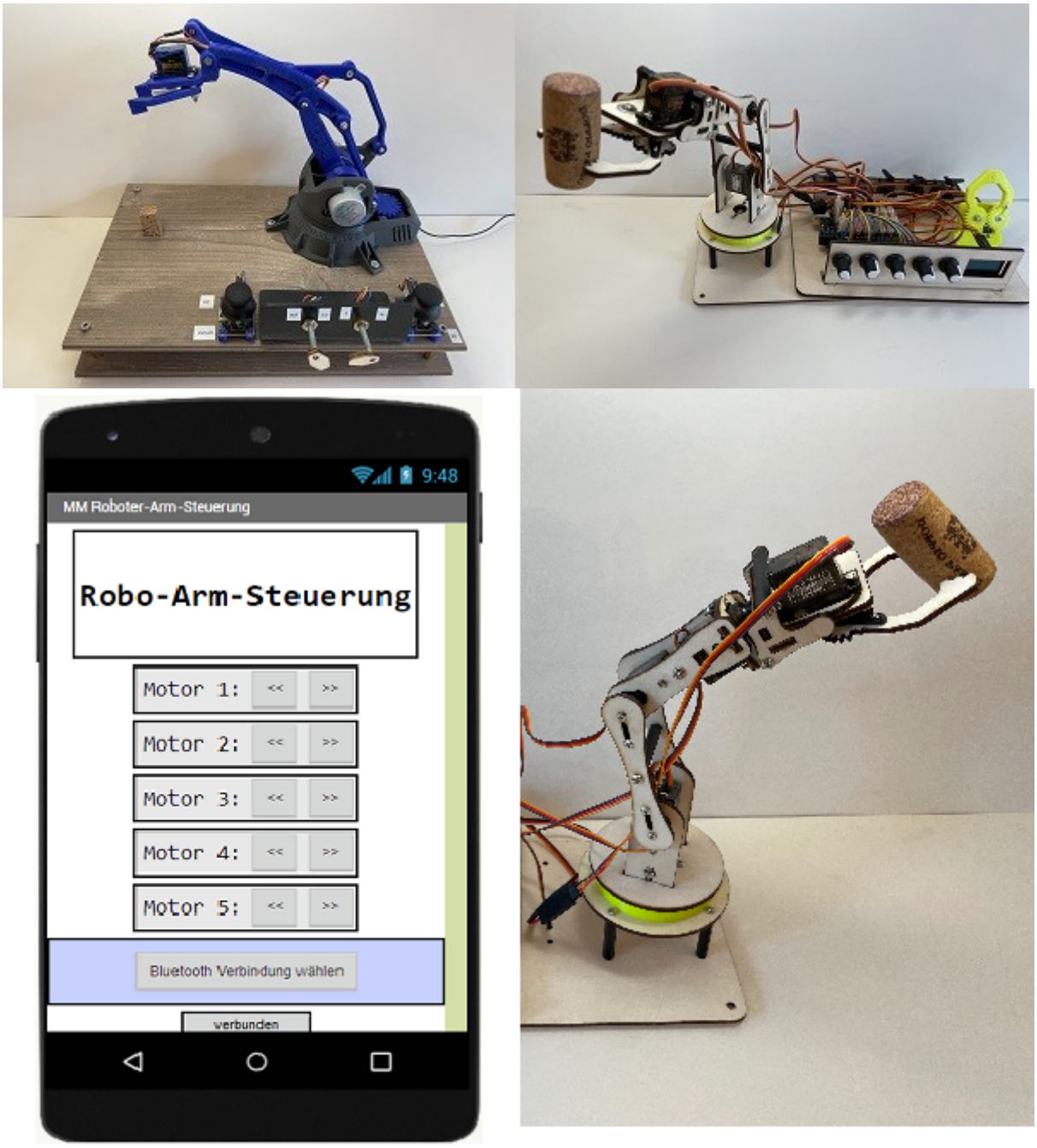
Robotik

- Greifarm / Robo-Arm
- Robi
- Robotik kennenlernen
- Hubsi, Egone und Johnny
- ESP32 Cam

Greifarm / Robo-Arm

mit Schrittmotore und Servomotore

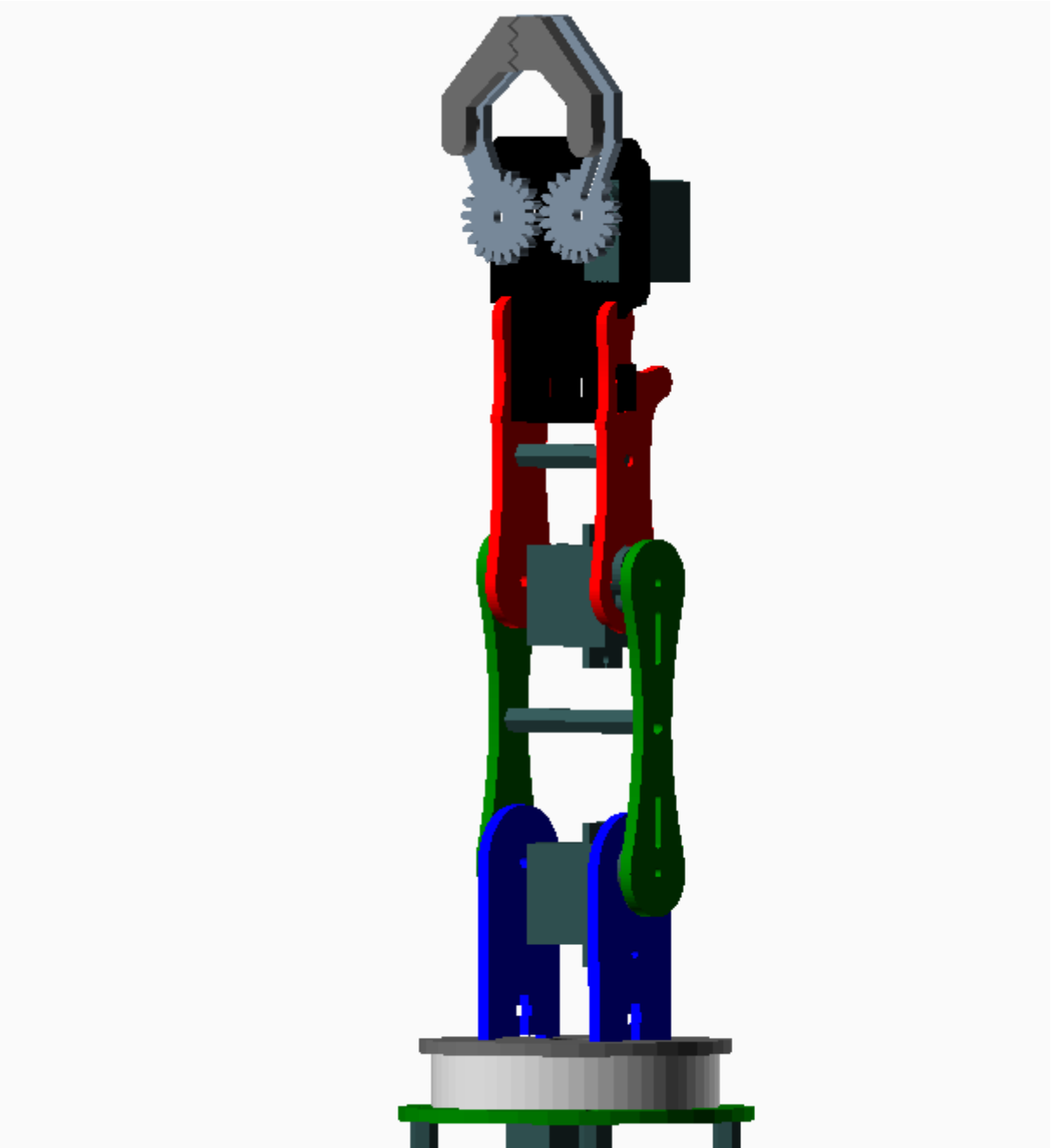


Greifarm mit Handy APP Steuerung

Greifer



Robo Arm



Montage Anleitung

Einleitung

Diese Anleitung beschreibt den Aufbau eines Robo Arm aus 3mm Sperrholz mit einem Arduino NANO. Die Gelenke der Greifarme werden mit Servo-Motore angetrieben, die Ansteuerung erfolgt über einen Arduino NANO und vier Potis. Optional ist eine Ansteuerung über eine APP und die Drehwinkelanzeige mit einen OLED-Display möglich.

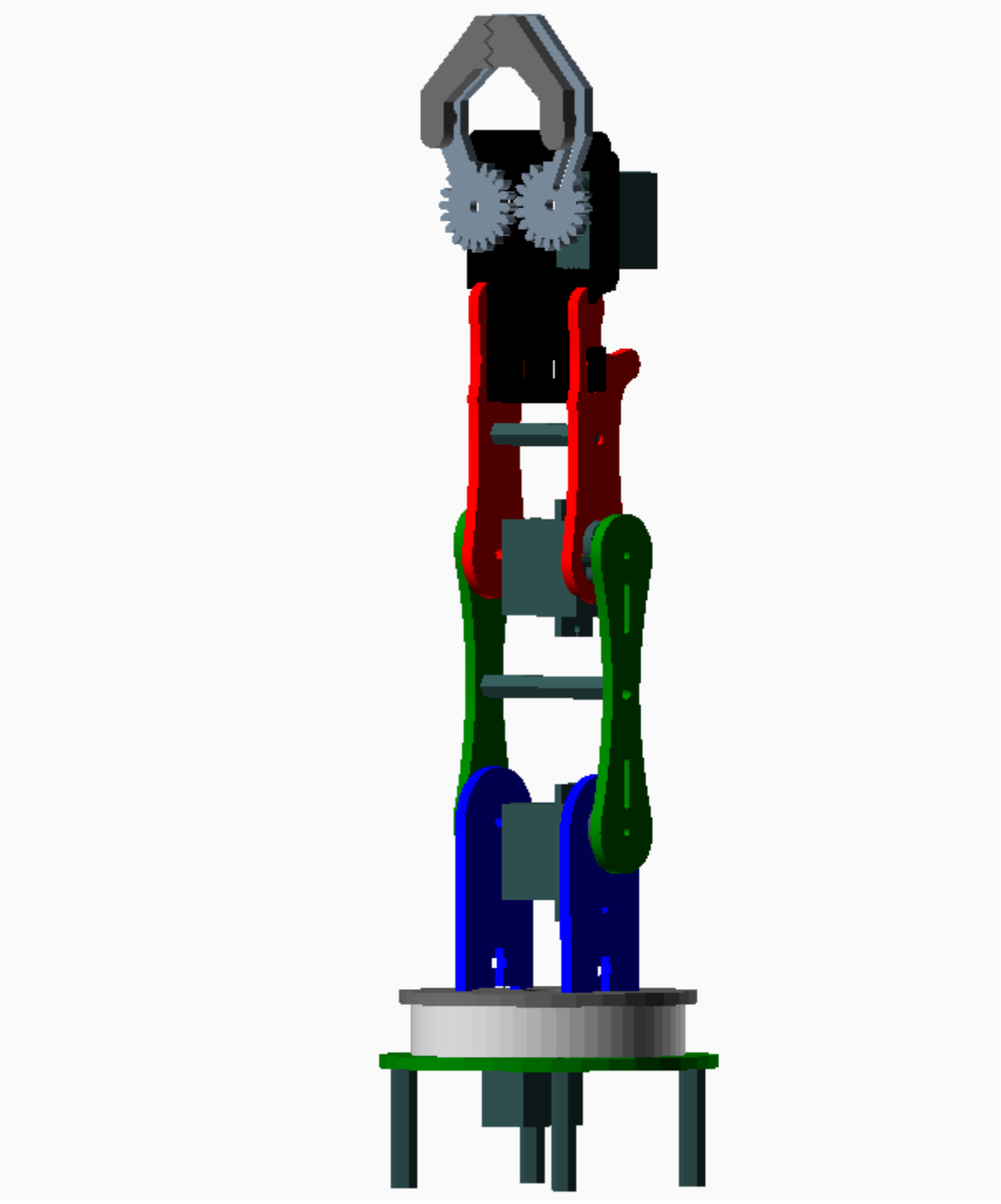
Stückliste

Das benötigen wir für den Robo Arm:

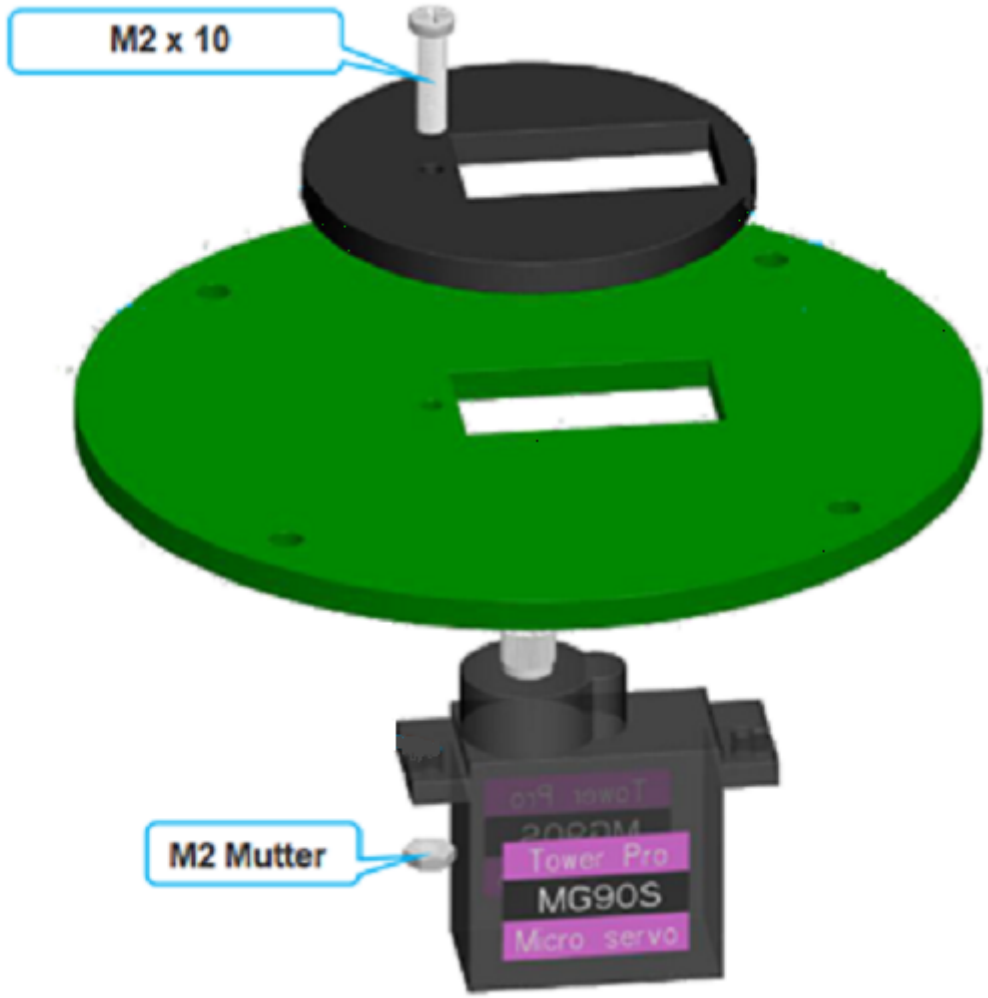
- ◦ 1 x Sperrholzplatte 3mm x 600x300
  ◦ 4 x Digital Servo mg996r Metallgetriebe
  ◦ 1 x Arduino NANO
  ◦ 1 x NANO Shield
  ◦ 4 x Potis 10k
  ◦ 1 x 50cm Litze
  ◦ 4 x Platinenstecker 3pol
  ◦ 1 x Steckenetzteil 5V, alternativ: 1x18650 Akku mit Case
  ◦ 5 x M2 x 10 Schrauben
  ◦ 5 x M2 Mutter
  ◦ 4 x M2,5 x 10 Schrauben
  ◦ 12 x M3 x 10 Schrauben
  ◦ 1 x M3 x 20 Schraube
  ◦ 5 x M3 Mutter
  ◦ 5 x M3 Mutter selbstsichernd
  ◦ 1 x M3 x 30 Abstandshalter

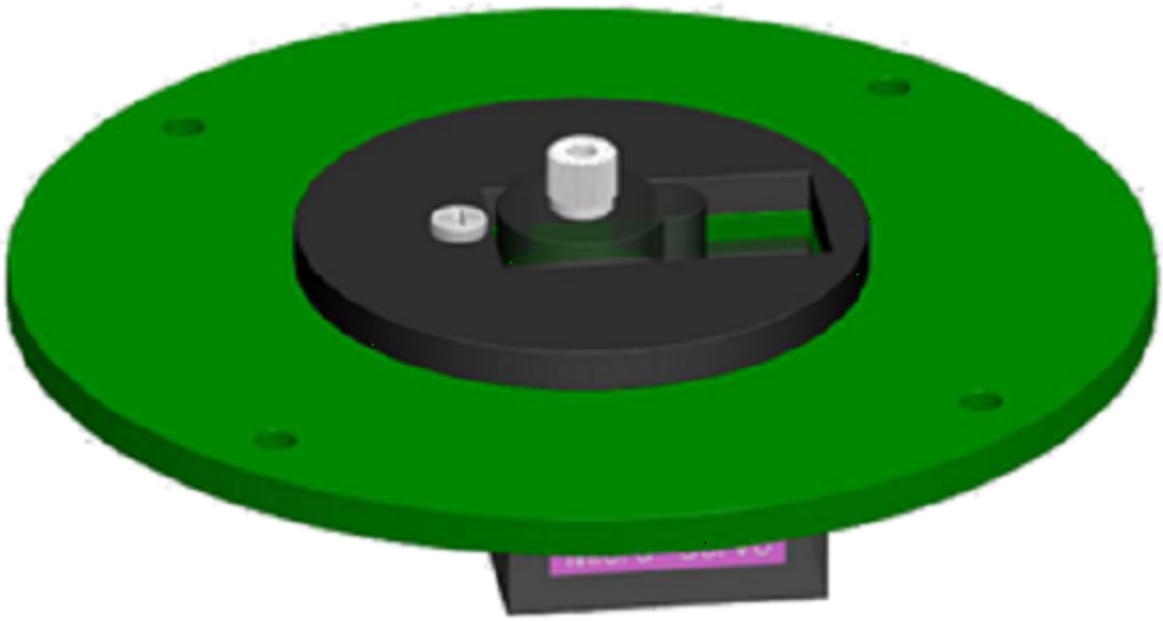
- 1 x M3 x 40 Abstanshalter

Robo Arm Montage - Gesamtansicht

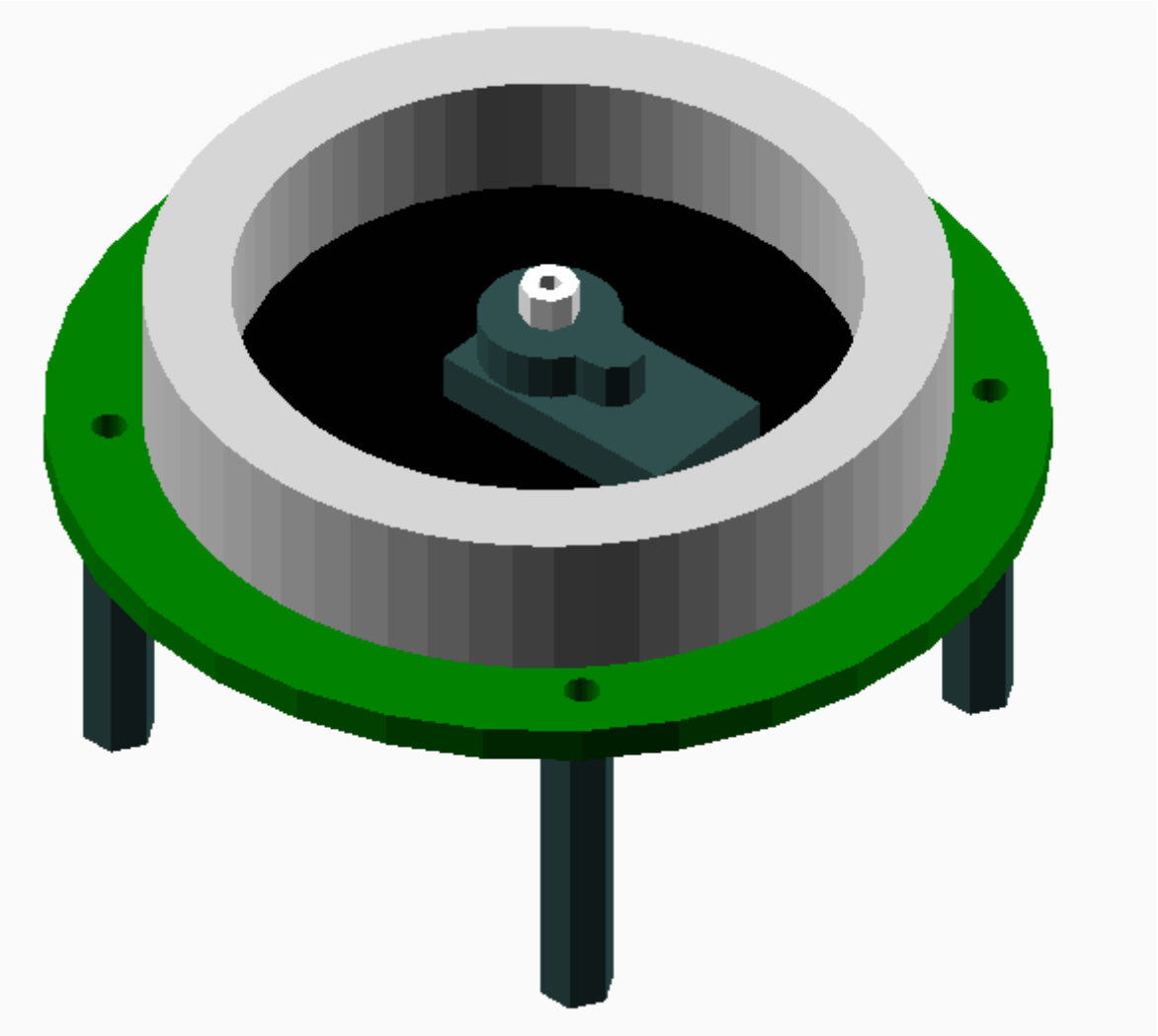


Drehteller Montage

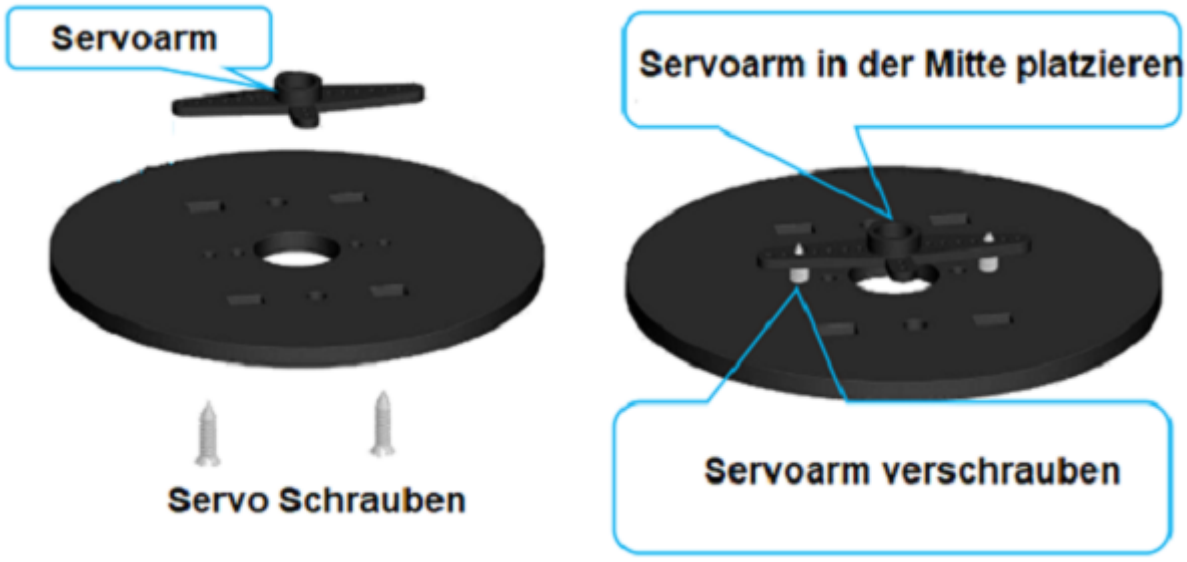

M2 x 10
M2 Mutter
Tower Pro
MG90S
Micro servo

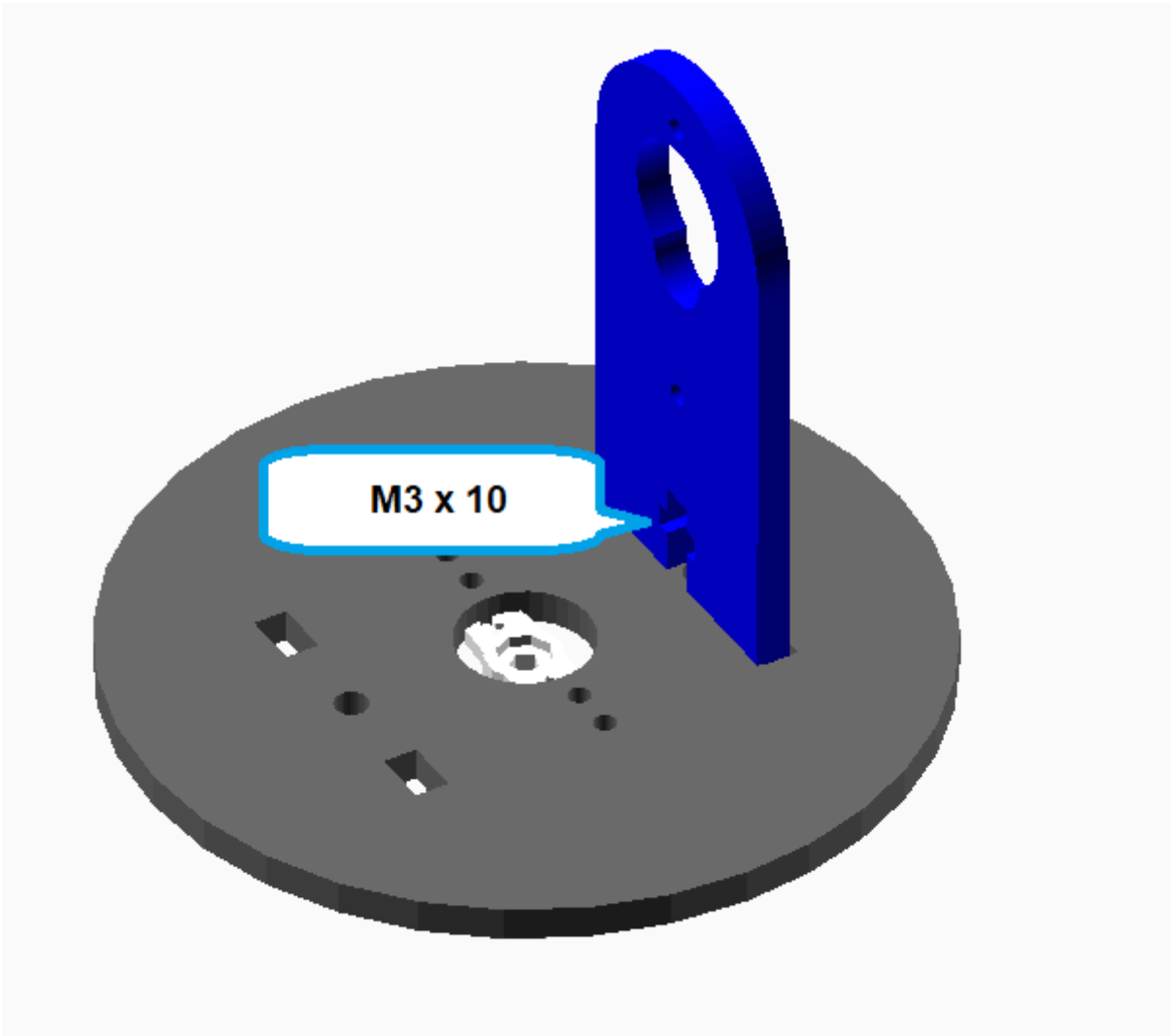


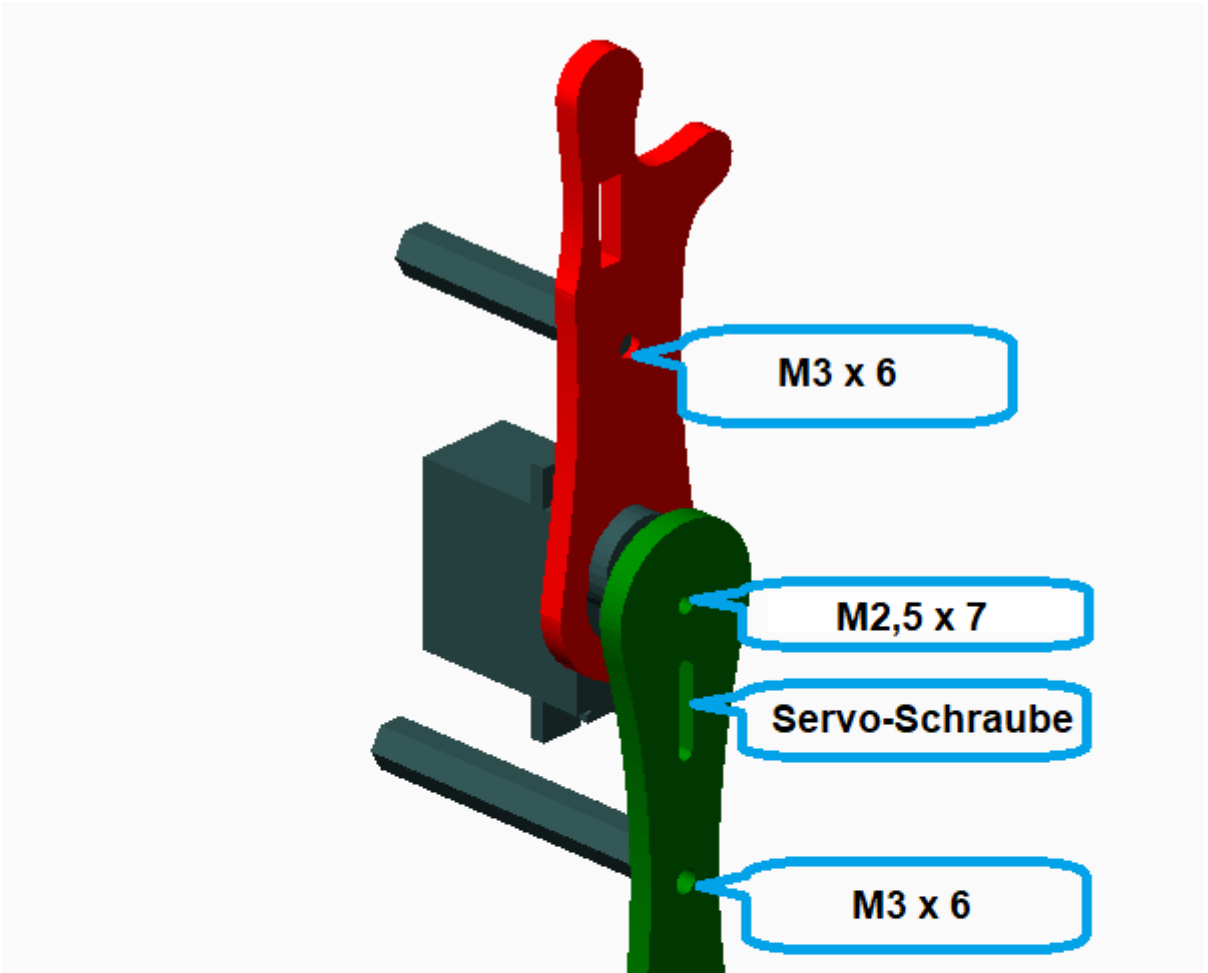
Axiallager Montage

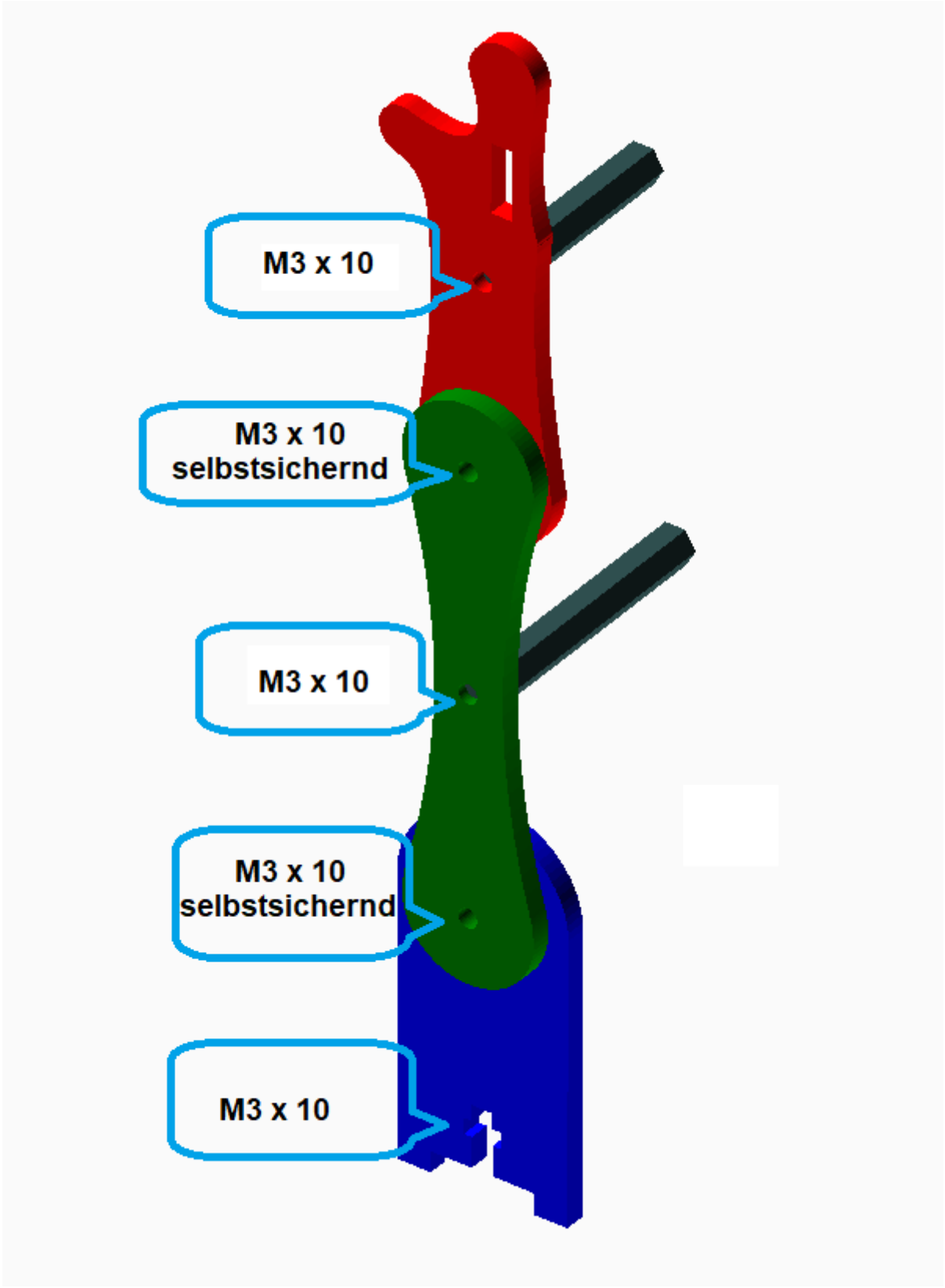


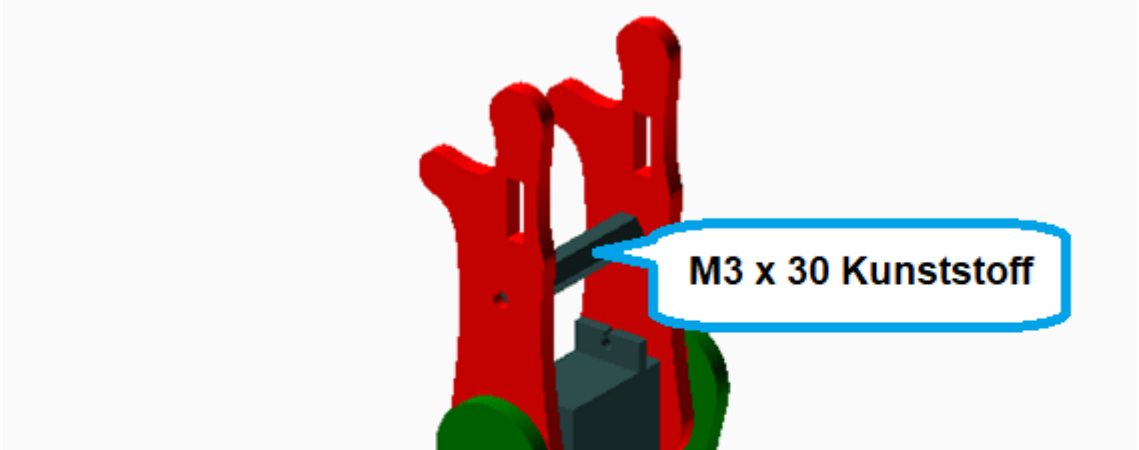
Gelenkarm Montage



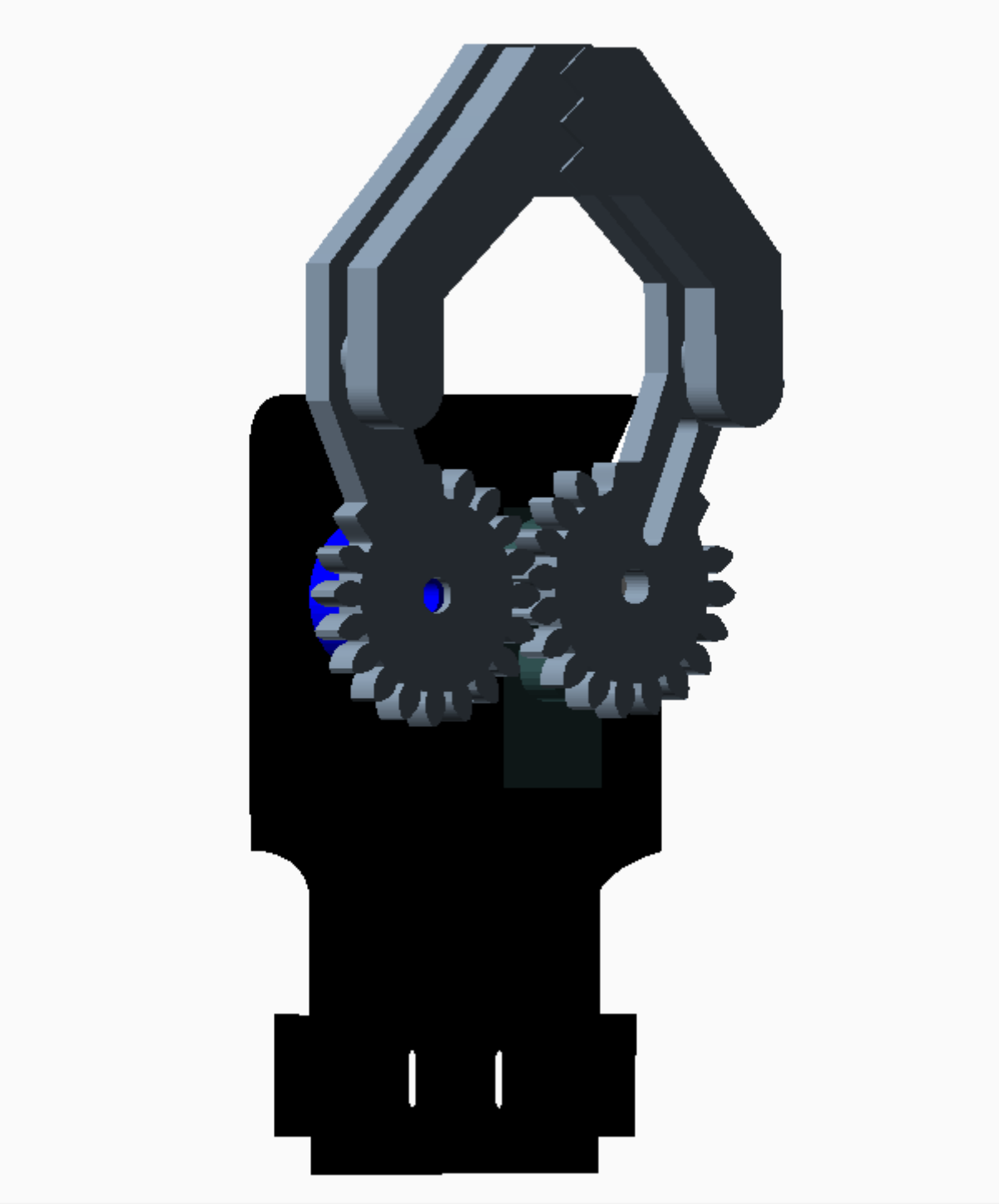

M3 x 10

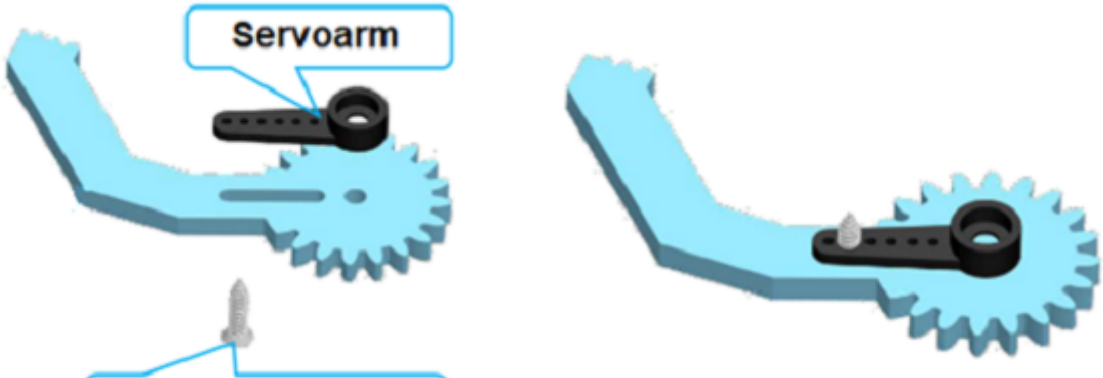

M3 x 6
M2,5 x 7
Servo-Schraube
M3 x 6

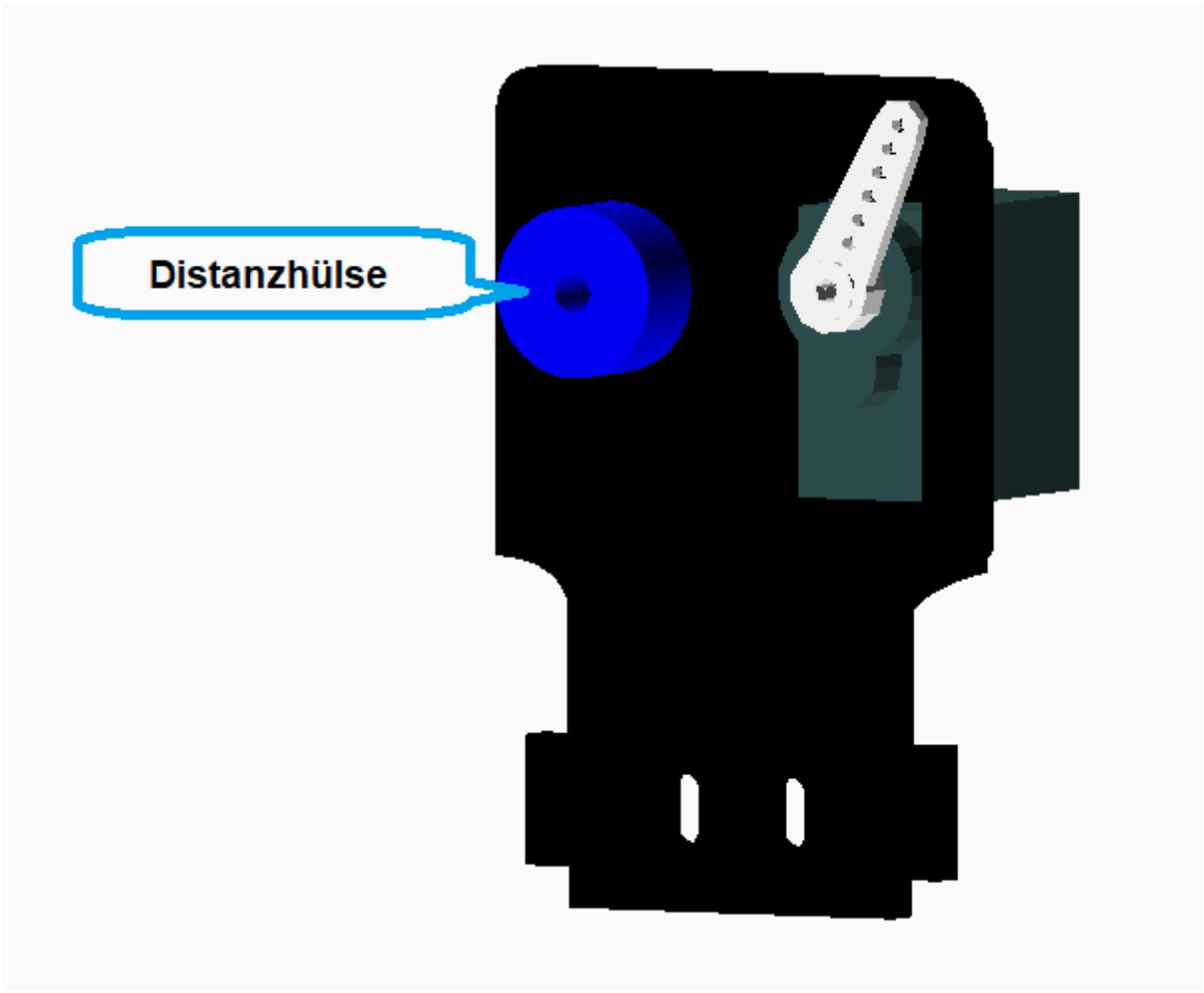

M3 x 10
M3 x 10
selbstsichernd
M3 x 10
M3 x 10
selbstsichernd
M3 x 10

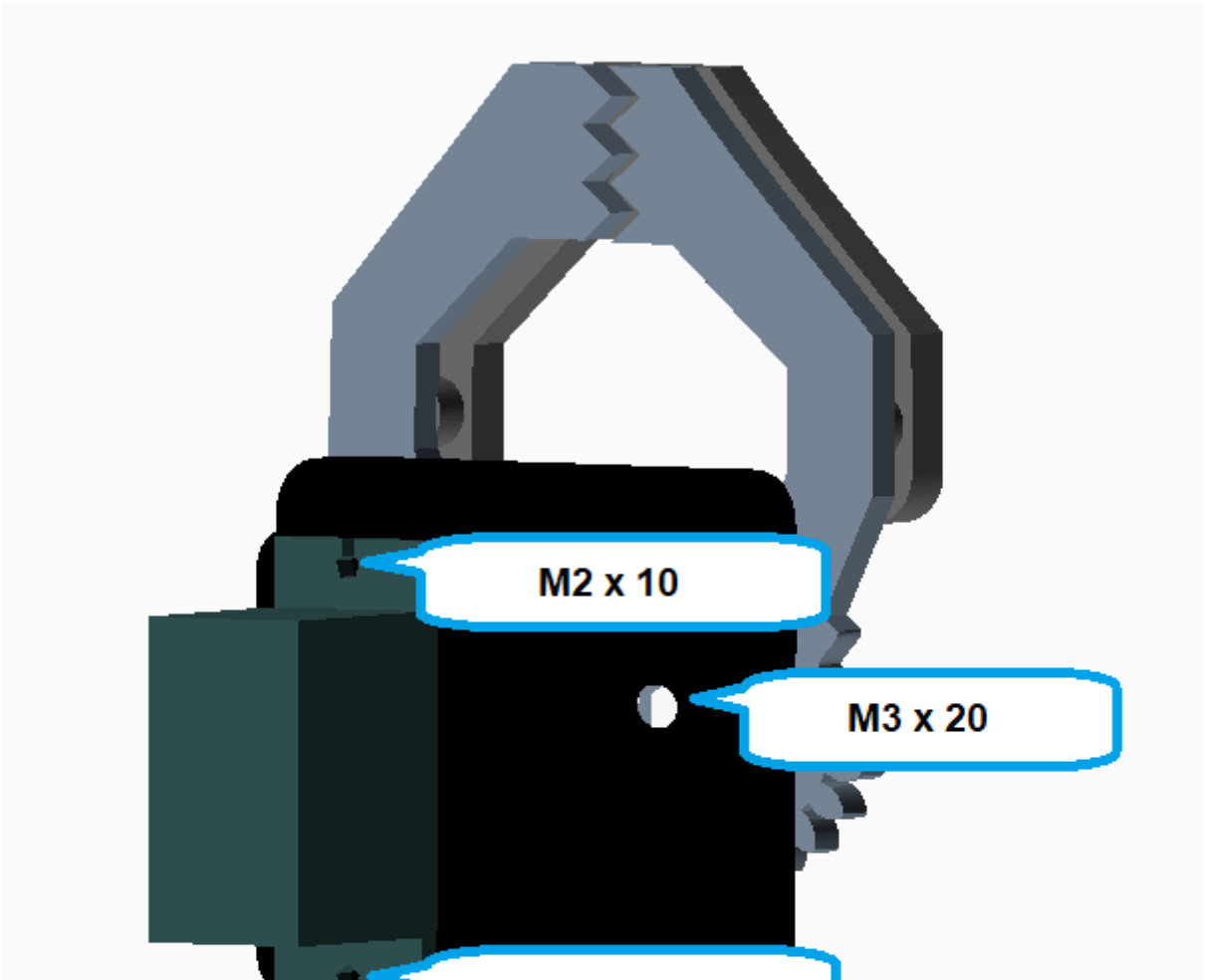

M3 x 30 Kunststoff

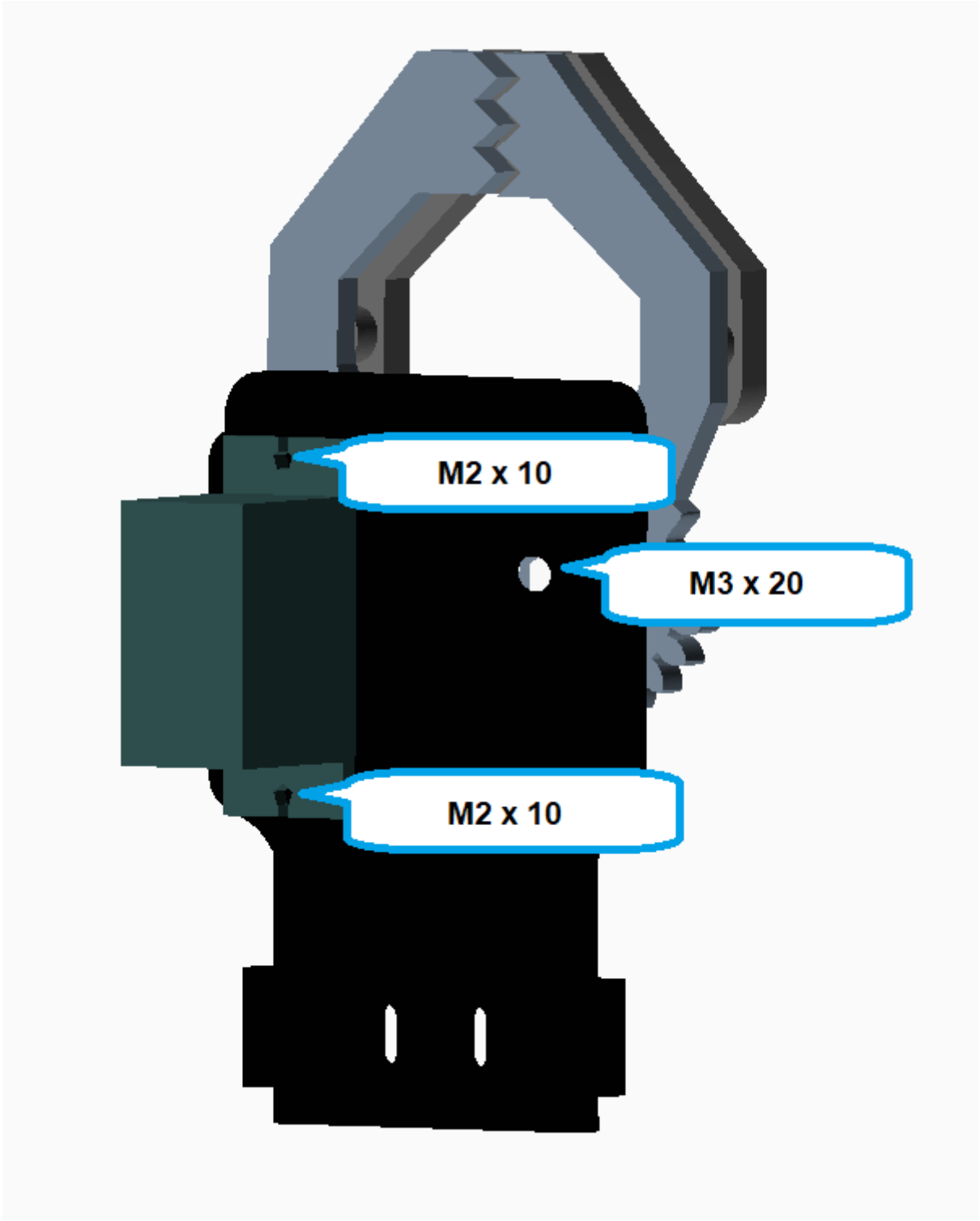
Greifer Montage

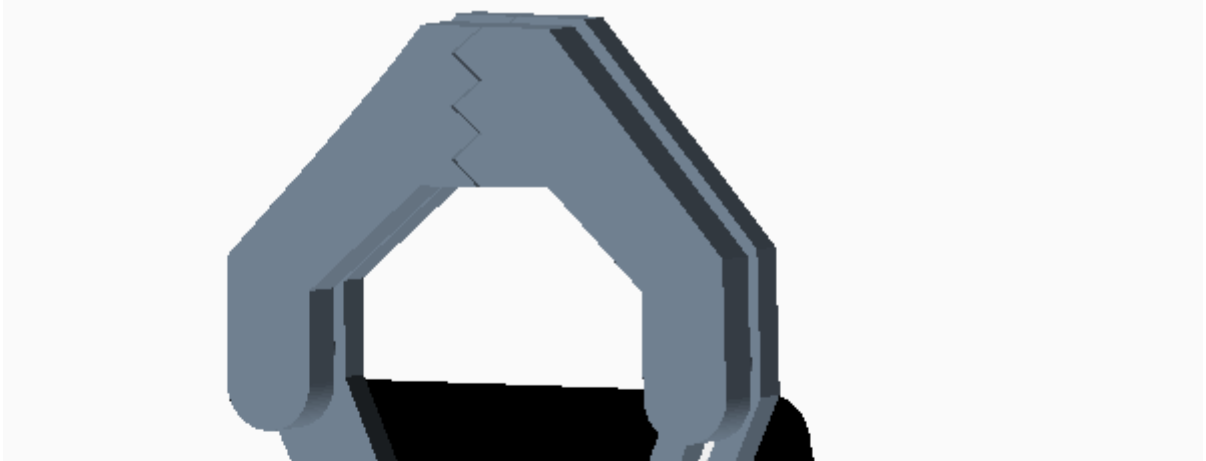


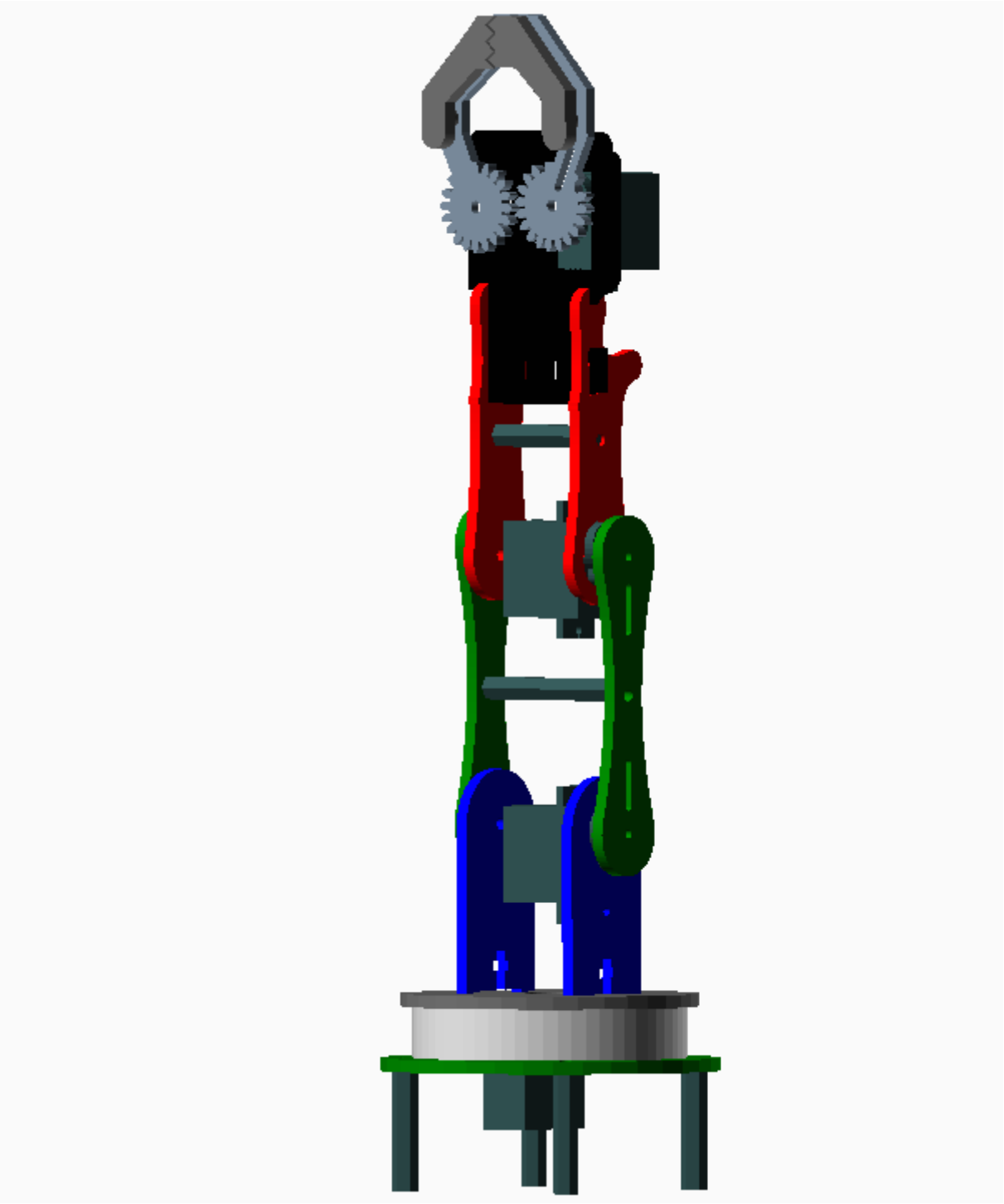



Distanzhülse


M2 x 10
M3 x 20


M2 x 10
M3 x 20
M2 x 10

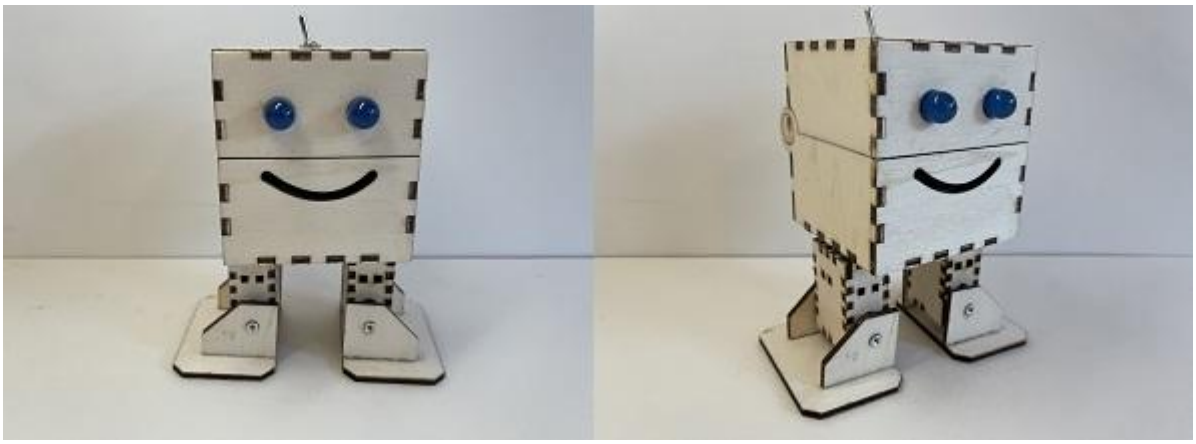


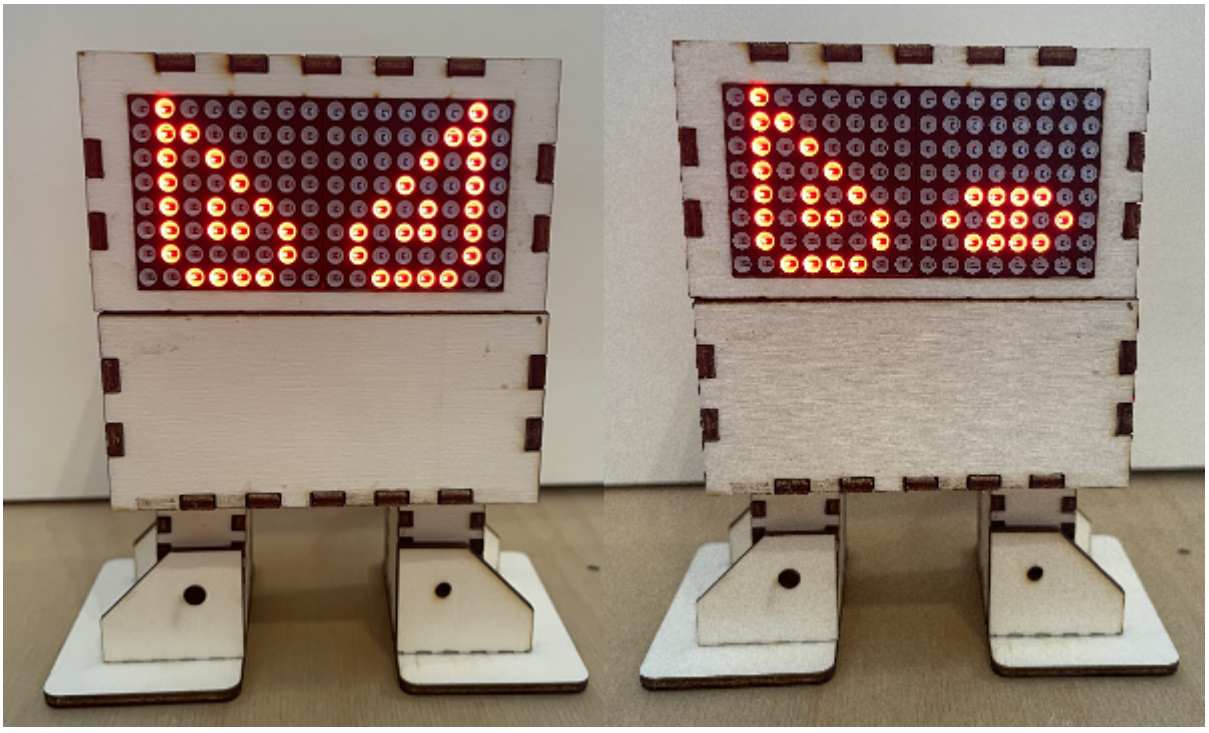


Fertig!

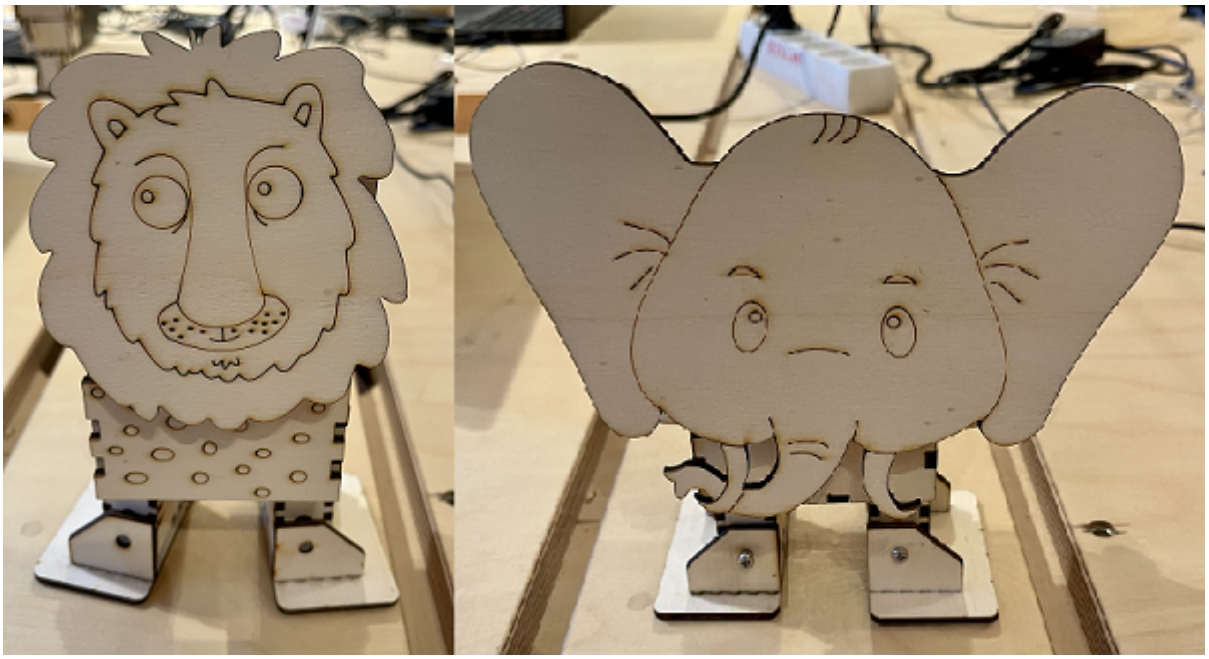
Robi

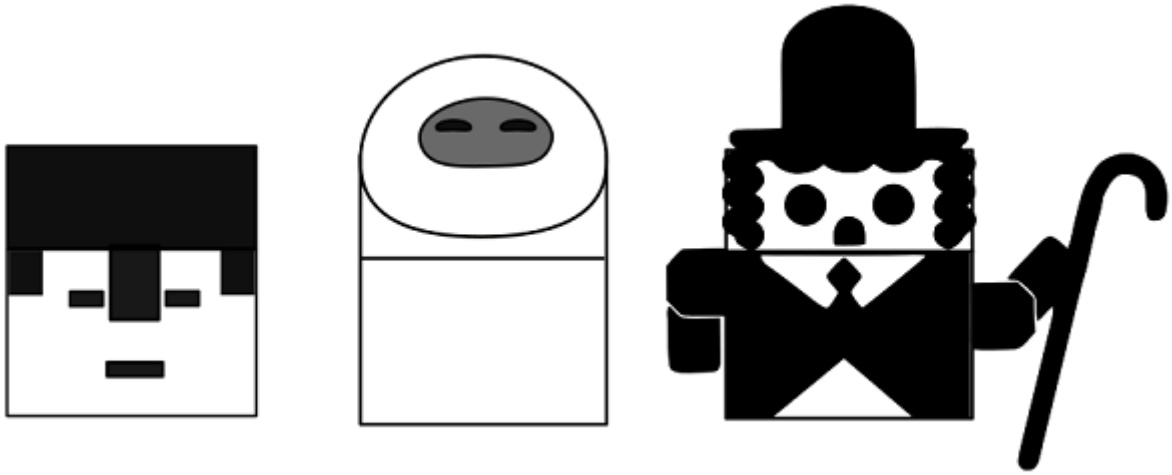
Baue einen Roboter, lerne ihn laufen und





entwerfe dein eigenes Design

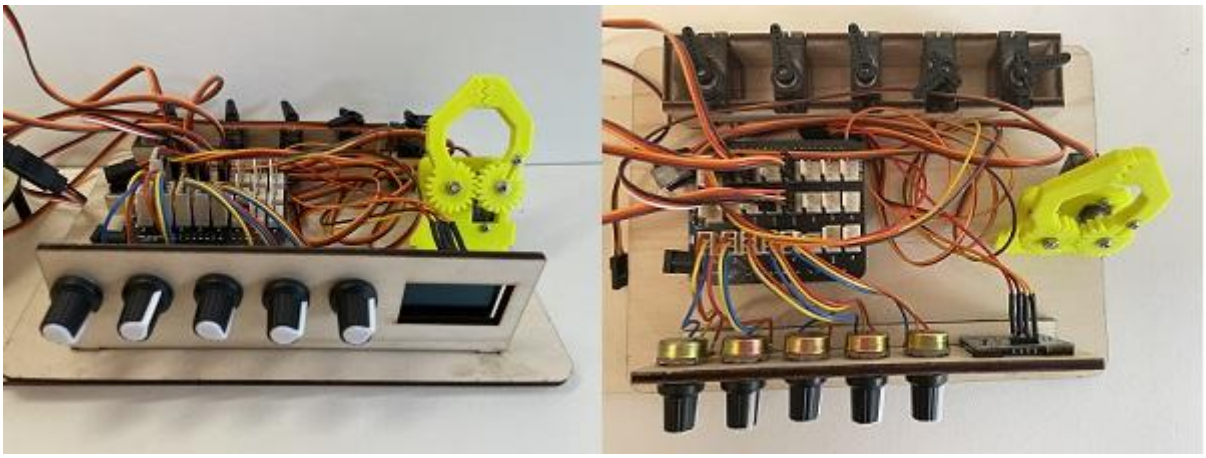






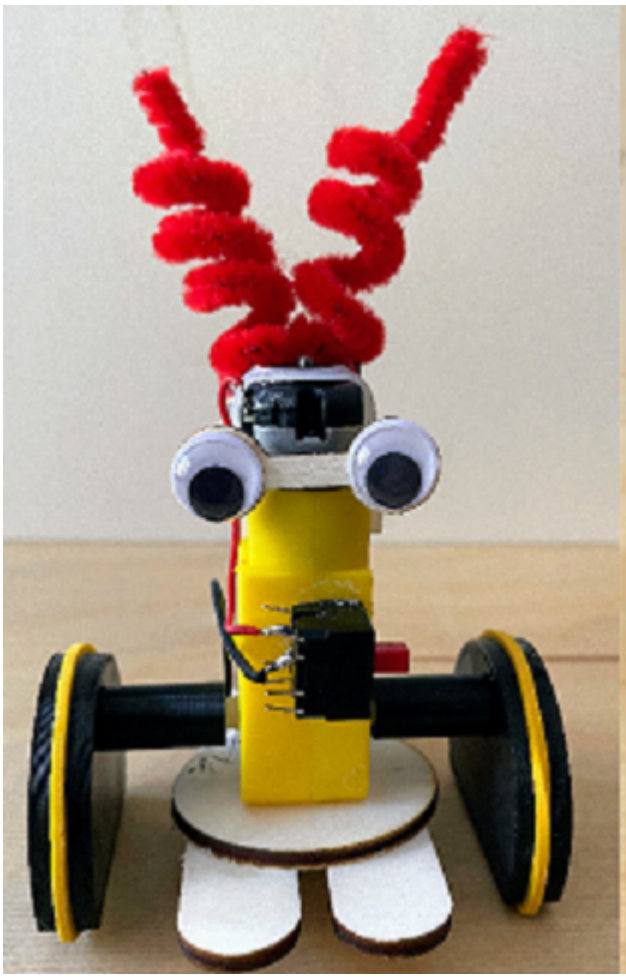
Robotik kennenlernen

Komponenten, Ansteuerung, Programmierung



Hubsi, Egone und Johnny

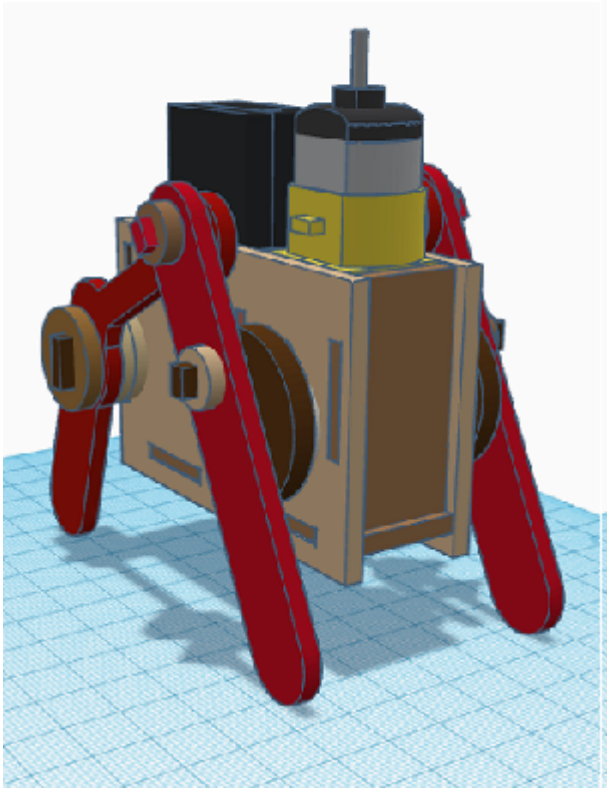
Kleine Bots mit Getriebemotor

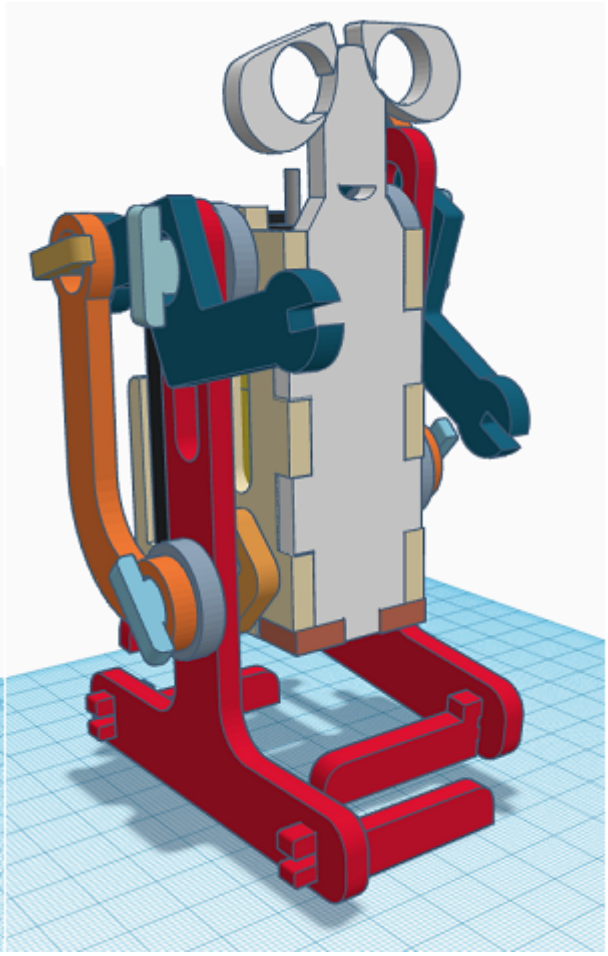












ESP32 Cam

Mit Drehteller und micro:bit Steuerung



