

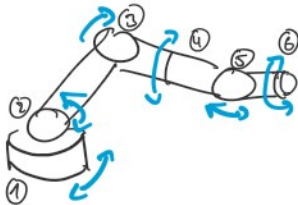
Planning

Sunday, 22 November 2020 20:35

ZIELE:

- ① • Allg. Anforderungen
→ DDF
→ Payload
:
- ② ↳ Motoren Anforderungen
- ③ ↳ Filament/Austragen
- ④ ↳ μ Controller

① Allg. Anforderungen



① Stepper m. Riemen-Übersetzung

- Nema 17
- DRV Interface

② Servo Motor m. Encoder (180° reichen)

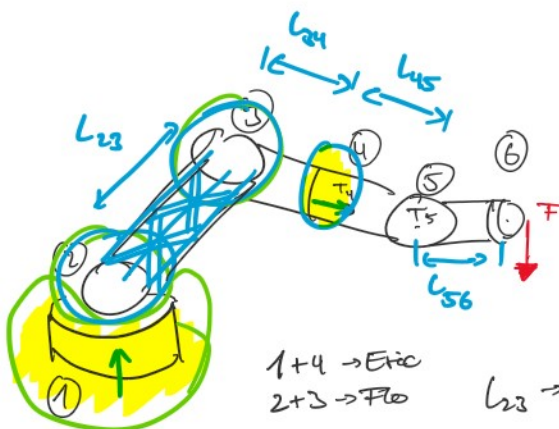
1 kg cm \rightarrow 50g
1 kg cm \rightarrow 10g

③ Servo wie

④

⑤

⑥ 1 kg cm \rightarrow 9g



Payload 500g

1+4 \rightarrow Eric
2+3 \rightarrow Flo

$L_{23} \rightarrow 170$

$L_{34} \rightarrow 85$

$L_{45} \rightarrow 85$

$L_{56} \rightarrow 45$

$T_6 = 0 \text{ Nm}$

$T_5 = L_{56} \cdot (F + m_6 \cdot g)$

$$T_3 = m_4 \cdot g \cdot L_{34} + m_5 \cdot g \cdot (L_{34} + L_{45}) + (F + m_6) \cdot g \cdot (L_{34} + L_{45} + L_{56})$$

$$T_2 = [L_{26} \cdot (m_6 + \text{Payload}) + L_{25} \cdot m_5 + L_{24} \cdot m_4 + L_{23} \cdot m_3]$$

$$l_6 = 0 \text{ mm}$$

$$T_5 = L_{56} \cdot (F + m_6 \cdot g)$$

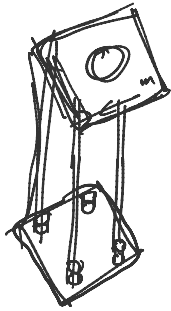
$$kg \text{ cm} \quad N \text{ mm}$$

$$10 \cdot kg \text{ cm} = kg \text{ mm}$$

$$9.5 \cdot 10 \cdot kg \cdot cm =$$

$$m \cdot g = F$$

$$2Nm$$



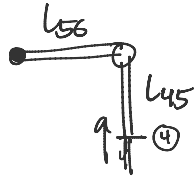
$$L_{45}$$

$$L_{56} \rightarrow 45$$

$$+ L_{25} \cdot m_5$$

$$+ L_{24} \cdot m_4$$

$$+ L_{23} \cdot m_3 \} \cdot g$$



$$(F + m) \cdot g \cdot L_{56}$$

$$2N \rightarrow 0.2kg \cdot 10$$

