

Geg.: $a, b, r, T; C_z$ (siehe Blatt 2)

$$\sum F_{x\text{-Achse}} = 0 = A_x$$

$$\sum F_{y\text{-Achse}} = 0 = F + A_y + B_y + F$$

$$\sum F_{z\text{-Achse}} = 0 = A_z + B_z - C_z$$

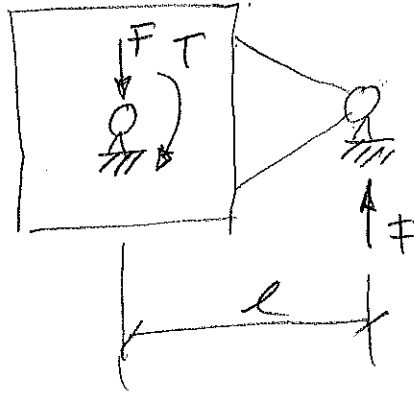
$$\sum M_{[B]} \text{ z-Achse} = 0 = F(a+b) + A_y \cdot b - F \cdot a$$

$$\sum M_{[B]} \text{ x-Achse} = 0 = F \cdot r - T + F \cdot r$$

$$\sum M_{[B]} \text{ y-Achse} = 0 = A_z \cdot b - C_z \cdot c$$

$$\Rightarrow \begin{aligned} F &= \frac{I}{2 \cdot r} & B_y &= -\frac{I}{2 \cdot r} \\ A_x &= 0 & B_z &= C_z \left(1 - \frac{c}{b}\right) \\ A_y &= -\frac{I}{2 \cdot r} \\ A_z &= C_z \cdot \frac{c}{b} \end{aligned}$$

Antrieb mit Drehmomentstütze



$$F = \frac{T}{l}$$

$$G_z = \frac{T}{l} + F_g$$

; F_g : Gewichtskraft