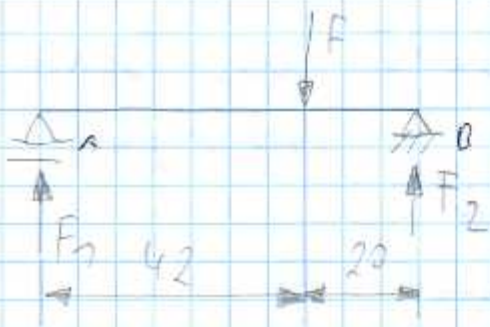




$$\sum M_{Fix} = 0: F_1 + F_2 - F = 0$$

$$\sum M(B) = 0: -F \cdot 20 + F_1 \cdot 62 = 0$$

$$F_1 = \frac{2000 \cdot 20}{62}$$

$$F_1 = 645 \text{ N}$$

$$F_2 = 1355 \text{ N}$$

ang: 10000

$$L_{10h} = \frac{10^6 \cdot L_{10}}{60 \cdot n}$$

RM S500
14.5a

$$L_{10} = \frac{L_{10h} \cdot 60 \cdot n}{10^6} = \frac{20000 \cdot 60 \cdot 1000}{10^6} = 1200 \cdot 10^4$$

$$L_{10} = \left(\frac{C}{P} \right)^6$$

$$C = \sqrt[6]{1200} \times 1,355 \text{ kN} = \underline{\underline{14,4 \text{ kN}}}$$

Lager gewählt 6304-2Z aus SKF WLK

$$\underline{\underline{E = 16,8 \text{ kN}}}$$