

Zad. 2

$$E := 8 \text{ GPa}$$

$$L := 5 \text{ m}$$

$$b := 4 \text{ cm}$$

$$h := 5 \text{ cm}$$

$$g := 20 \text{ cm}$$

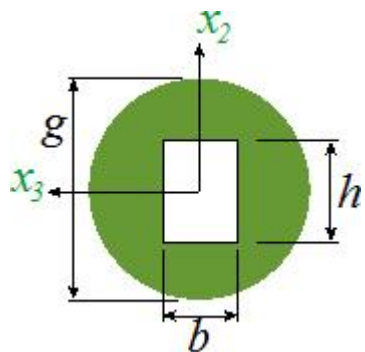
$$mb :=$$

$$\text{Sch} := 4$$

$$\mu := mb_{\text{Sch}}$$

$$Lw := \mu \cdot L$$

$$mb := \begin{pmatrix} 2 \\ 1 \\ 0.699156 \\ 0.5 \end{pmatrix}$$



$$J3 := \frac{-b \cdot h^3}{12} + \frac{\pi g^4}{64} = 7.812315 \times 10^3 \cdot \text{cm}^4$$

$$J2 := \frac{-b^3 \cdot h}{12} + \frac{\pi g^4}{64} = 7.827315 \times 10^3 \cdot \text{cm}^4$$

$$J := \min(J2, J3) = 7812.314967 \cdot \text{cm}^4$$

$$P_{kr} := \frac{\pi^2 E \cdot J}{Lw^2} = 986.937 \cdot \text{kN}$$

