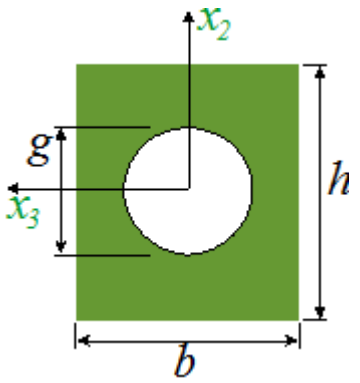
Grupa A2

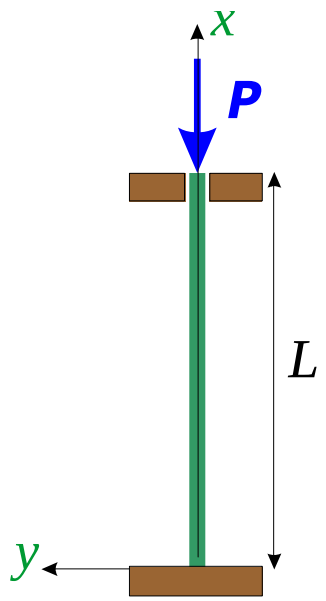
$E := 19GPa \quad L := 11m \quad b := 12cm \quad h := 13cm \quad g := 7cm$

$$J2 := \frac{h \cdot b^3}{12} - \frac{\pi g^4}{64} = 1754.141 \cdot cm^4$$

$$J3 := \frac{h^3 \cdot b}{12} - \frac{\pi g^4}{64} = 2079.141 \cdot cm^4$$

$$J := \min(J2, J3) = 1754.141 \cdot cm^4$$





$\cos(z) = 1$

$$Pkr := \frac{z^2 E \cdot J}{L^2} = 108.74 \cdot kN$$