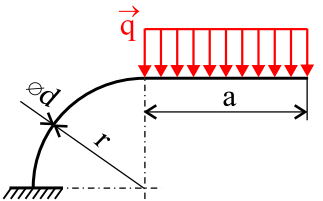
Problem 623

Determine the displacement of the free end of the beam with circular cross section loaded by distributed load $\vec{q}$ according the figure. Gravitational forces can be neglected.



Input values:

$a = 2\,\mathrm{m}, \quad q = 100\,\mathrm{Nm}^{-1}, \quad E = 2 \cdot 10^5\,\mathrm{MPa},$

$r = 1\,\mathrm{m}, \quad \emptyset d = 0,04\,\mathrm{m}, \quad \sigma_K = 300\,\mathrm{MPa}$

Solutions angular and curved beams procedure of solving supported beams

CONTENT List of examples