

ΕΝΔΕΙΚΤΙΚΕΣ ΑΠΑΝΤΗΣΕΙΣ

Θέμα 4°

Ισχύει ότι: $p \leq p_{\varepsilon\pi}$. Έστω ότι $p = p_{\varepsilon\pi}$

Επομένως:

$$p_{\varepsilon\pi} = \frac{F_{\varepsilon\pi}}{\frac{\pi}{4} \cdot (d^2 - d_1^2) \cdot z} \Rightarrow F_{\varepsilon\pi} = p_{\varepsilon\pi} \cdot \frac{\pi}{4} \cdot (d^2 - d_1^2) \cdot z \Rightarrow$$

$$F_{\varepsilon\pi} = 200 \frac{\text{daN}}{\text{cm}^2} \cdot \frac{3,14}{4} (3^2 \text{ cm}^2 - 2^2 \text{ cm}^2) \cdot 10 \Rightarrow$$

$$F_{\varepsilon\pi} = 200 \frac{\text{daN}}{\text{cm}^2} \cdot \frac{3,14}{4} (9 \text{ cm}^2 - 4 \text{ cm}^2) \cdot 10 \Rightarrow F_{\varepsilon\pi} = 200 \frac{\text{daN}}{\text{cm}^2} \cdot \frac{3,14}{4} 5 \text{ cm}^2 \cdot 10 \Rightarrow$$

$$F_{\varepsilon\pi} = 7850 \text{ daN}$$