

TABULKA 2

DEFORMACE PROSTÉHO NOSNÍKU KONSTANTNÍHO PRŮŘEZU

Zatěž. případ	Schéma zatížení	Průhyb y $y_{max} = f$	Pootočení podporových průřezů
1		$f = \frac{F a b}{27 E J l} \sqrt{3 a (1+b)^3}$ $v x = \sqrt{\frac{1}{3}} a (1+b)$	$\varphi_a = \frac{F b}{6 E J l} (l^2 - b^2)$ $\varphi_b = \frac{F a}{6 E J l} (l^2 - a^2)$
2		$f = \frac{F l^3}{48 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{F l^2}{16 E J}$
3		$f = \frac{F l^3}{28,17 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{F l^2}{9 E J}$
4		$f = \frac{F l^3}{20,22 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{5}{32} \cdot \frac{F l^2}{E J}$
5		$f = \frac{F l^3}{15,73 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{1}{5} \cdot \frac{F l^2}{E J}$
6		$f = \frac{F l^3}{13,05 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{35}{144} \cdot \frac{F l^2}{E J}$
7		$f = \frac{F l^3}{24 E J} (3 \frac{a}{l} - 4 \frac{a^3}{l^3})$ $v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{F a}{2 E J} (1-a)$
8		$f = \frac{11}{384} \cdot \frac{F l^3}{E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{3}{32} \cdot \frac{F l^2}{E J}$
9		$f = \frac{F l^3}{24,45 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{19}{144} \cdot \frac{F l^2}{E J}$
10		$f = \frac{F l^3}{19,04 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{33}{192} \cdot \frac{F l^2}{E J}$
11		$f = \frac{F l^3}{15,1 E J} \quad v x = 0,5 l$	$\varphi_a = \varphi_b = \frac{51}{240} \cdot \frac{F l^2}{E J}$
12		$y = \frac{q a^3 b}{24 E J} (4 - 3 \frac{a}{l})$ $v x = a$	$\varphi_a = \frac{q a^2 l}{6 E J} (1 - \frac{a}{2l})^2$ $\varphi_b = \frac{q a^2 l}{12 E J} (1 - \frac{a^2}{2l^2})$
13		$y = \frac{q c}{6 E J} [\frac{a b}{l} (2 a l - 2 a^2 - \frac{c}{4}) + \frac{c^3}{64}] \quad v x = a$	$\varphi_a = \frac{q}{24 E J} \cdot \frac{b c}{l} [4 a (1+b) - c^2]$ $\varphi_b = \frac{q}{24 E J} \cdot \frac{a c}{l} [4 b (1+a) - c^2]$
29			$\Delta z_1 = \Delta z_d - \Delta z_h$ $\varphi_a = \varphi_b = \frac{\alpha_T \cdot \Delta z_1 \cdot L}{2 \cdot h}$