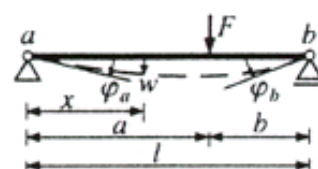
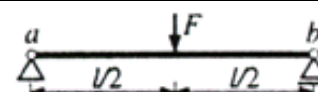
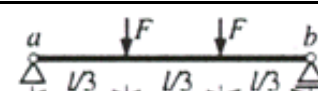
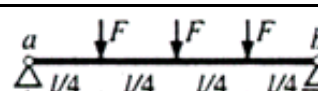
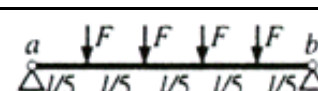
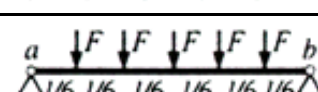
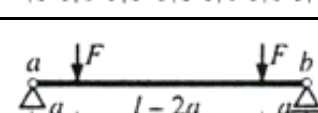
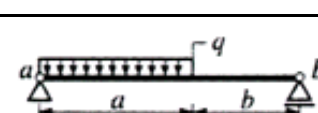
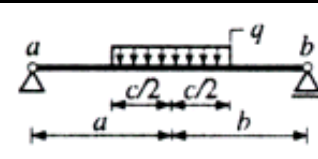
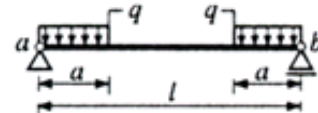
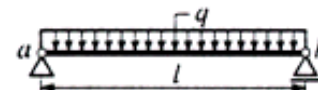

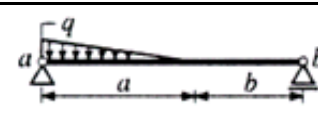
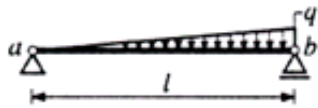


Tabulka 3.3 Deformace prostého nosníku konstantního průřezu

Schéma zatížení	Průhyb $w$	Pootočení volného konce $\varphi$
	$\frac{F \cdot a \cdot b}{27 \cdot E \cdot I \cdot l} \cdot \sqrt{3 \cdot a \cdot (l + b)^3}$	$\varphi_a = \frac{F \cdot a \cdot b}{6 \cdot E \cdot I \cdot l} \cdot (l + b)$ $\varphi_b = \frac{F \cdot a \cdot b}{6 \cdot E \cdot I \cdot l} \cdot (l + a)$
	$\frac{F \cdot l^3}{48 \cdot E \cdot I}$	$\varphi_a = \varphi_b = \frac{F \cdot l^2}{16 \cdot E \cdot I}$
	$\frac{23}{648} \cdot \frac{F \cdot l^3}{E \cdot I}$	$\varphi_a = \varphi_b = \frac{F \cdot l^2}{9 \cdot E \cdot I}$
	$\frac{19}{384} \cdot \frac{F \cdot l^3}{E \cdot I}$	$\varphi_a = \varphi_b = \frac{5}{32} \cdot \frac{F \cdot l^2}{E \cdot I}$
	$\frac{63}{1000} \cdot \frac{F \cdot l^3}{E \cdot I}$	$\varphi_a = \varphi_b = \frac{1}{5} \cdot \frac{F \cdot l^2}{E \cdot I}$
	$\frac{11}{144} \cdot \frac{F \cdot l^3}{E \cdot I}$	$\varphi_a = \varphi_b = \frac{35}{144} \cdot \frac{F \cdot l^2}{E \cdot I}$
	$\frac{F}{24 \cdot E \cdot I} \cdot (3 \cdot a \cdot l^2 - 4 \cdot a^3)$	$\varphi_a = \varphi_b = \frac{F \cdot a}{2 \cdot E \cdot I} \cdot (l - a)$
	$\frac{q \cdot a^3 \cdot b}{24 \cdot E \cdot I \cdot l} \cdot (4 \cdot l - 3 \cdot a)$	$\varphi_a = \frac{q \cdot a^2}{24 \cdot E \cdot I \cdot l} \cdot (2 \cdot l - a)^2$ $\varphi_b = \frac{q \cdot a^2}{24 \cdot E \cdot I \cdot l} \cdot (2 \cdot l^2 - a^2)$
	$\frac{q \cdot c}{6 \cdot E \cdot I} \cdot \left[ \frac{a \cdot b}{l} \cdot \left( 2 \cdot a \cdot l - 2 \cdot a^2 - \frac{c^2 \cdot 4}{3} \right) + \frac{c^3}{64} \right]$	$\varphi_a = \frac{q}{24 \cdot E \cdot I} \cdot \frac{b \cdot c}{l} \cdot [4 \cdot a \cdot (l + b) - c^2]$ $\varphi_b = \frac{q}{24 \cdot E \cdot I} \cdot \frac{a \cdot c}{l} \cdot [4 \cdot a \cdot (l + a) - c^2]$
	$\frac{q \cdot l^4}{48 \cdot E \cdot I} \cdot \frac{a^2}{l^2} \cdot \left( 3 - 2 \cdot \frac{a^2}{l^2} \right)$	$\varphi_a = \varphi_b = \frac{q \cdot a^2}{12 \cdot E \cdot I} \cdot (3 \cdot l - 2 \cdot a)$
	$\frac{5}{384} \cdot \frac{q \cdot l^4}{E \cdot I}$	$\varphi_a = \varphi_b = \frac{1}{24} \cdot \frac{q \cdot l^3}{E \cdot I}$
	$\frac{q \cdot a^3 \cdot l}{45 \cdot E \cdot I} \cdot \left( 5 - 9 \cdot \frac{a}{l} + 4 \cdot \frac{a^2}{l^2} \right)$	$\varphi_a = \frac{q \cdot a^2 \cdot l}{360 \cdot E \cdot I} \cdot \left( 40 - 45 \cdot \frac{a}{l} + 12 \cdot \frac{a^2}{l^2} \right)$ $\varphi_b = \frac{q \cdot a^2 \cdot l}{360 \cdot E \cdot I} \cdot \left( 5 - 3 \cdot \frac{a^2}{l^2} \right)$
	$\frac{q \cdot a^3 \cdot b \cdot l}{360 \cdot E \cdot I} \cdot \left( 20 \cdot \frac{a}{l} - 13 \cdot \frac{a^2}{l^2} \right)$	

$$\varphi_a = \frac{q \cdot a^2 \cdot l}{360 \cdot E \cdot I} \left( 20 \cdot 15 \cdot \frac{a}{l} + 3 \cdot \frac{a^2}{l^2} \right)$$

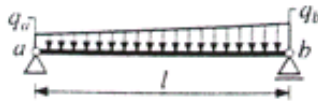
$$\varphi_b = \frac{q \cdot a^2 \cdot l}{360 \cdot E \cdot I} \left( 10 \cdot 3 \cdot \frac{a^2}{l^2} \right)$$



$$0,006522 \cdot \frac{q \cdot l^4}{E \cdot I}$$

$$\varphi_a = \frac{7}{360} \cdot \frac{q \cdot l^3}{E \cdot I}$$

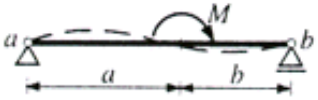
$$\varphi_b = \frac{8}{360} \cdot \frac{q \cdot l^3}{E \cdot I}$$



$$\frac{5}{768} \cdot (q_a + q_b) \cdot \frac{l^4}{E \cdot I}$$

$$\varphi_a = \frac{l^3}{360 \cdot E \cdot I} \cdot (8 \cdot q_a + 7 \cdot q_b)$$

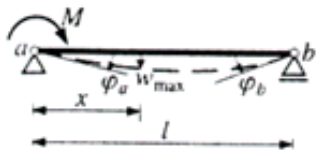
$$\varphi_b = \frac{l^3}{360 \cdot E \cdot I} \cdot (7 \cdot q_a + 8 \cdot q_b)$$



$$-\frac{M \cdot a \cdot b}{3 \cdot E \cdot I} \cdot \frac{a - b}{l}$$

$$\varphi_a = \frac{-M \cdot l}{6 \cdot E \cdot I} \cdot \left( 1 - 3 \cdot \frac{b^2}{l^2} \right)$$

$$\varphi_b = \frac{M \cdot l}{6 \cdot E \cdot I} \cdot \left( 1 - 3 \cdot \frac{a^2}{l^2} \right)$$



$$0,06415 \cdot \frac{M \cdot l^2}{E \cdot I}$$

$$\varphi_a = \frac{M \cdot l}{3 \cdot E \cdot I}; \quad \varphi_b = \frac{M \cdot l}{6 \cdot E \cdot I}$$