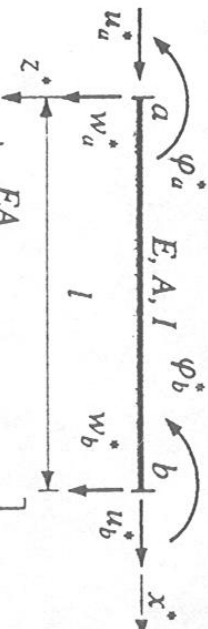


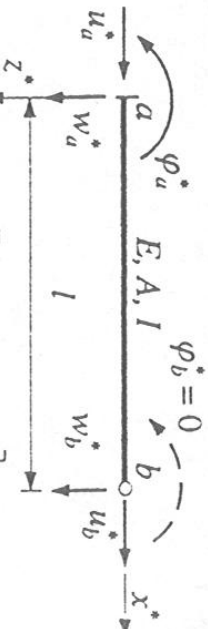
Tabulka 11.3. Lokální matice tuhosti prutu konstantního průřezu

(a) Prut oboustranně monoliticky připojený



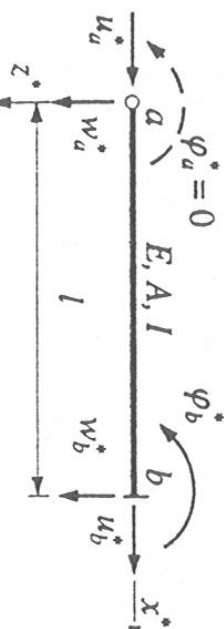
$$\mathbf{k}_{ab}^* = \begin{bmatrix} \frac{EA}{l} & 0 & 0 & 0 & 0 & 0 \\ 0 & \frac{12EI}{l^3} & \frac{6EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{6EI}{l^2} & \frac{4EI}{l} & 0 & 0 & 0 \\ 0 & 0 & 0 & \frac{EA}{l} & 0 & 0 \\ 0 & \frac{12EI}{l^3} & \frac{6EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{6EI}{l^2} & \frac{4EI}{l} & 0 & 0 & 0 \end{bmatrix}$$

(b) Prut pravostřanně kloubově připojený



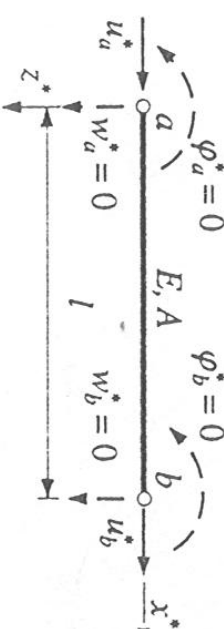
$$\mathbf{k}_{ab}^* = \begin{bmatrix} \frac{EA}{l} & 0 & 0 & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^3} & \frac{3EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^2} & \frac{3EI}{l} & 0 & 0 & 0 \\ 0 & 0 & 0 & \frac{EA}{l} & 0 & 0 \\ 0 & \frac{3EI}{l^3} & \frac{3EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^2} & \frac{3EI}{l} & 0 & 0 & 0 \end{bmatrix}$$

(c) Prut levostřanně kloubově připojený



$$\mathbf{k}_{ab}^* = \begin{bmatrix} \frac{EA}{l} & 0 & 0 & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^3} & \frac{3EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^2} & \frac{3EI}{l} & 0 & 0 & 0 \\ 0 & 0 & 0 & \frac{EA}{l} & 0 & 0 \\ 0 & \frac{3EI}{l^3} & \frac{3EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^2} & \frac{3EI}{l} & 0 & 0 & 0 \end{bmatrix}$$

(d) Prut oboustranně kloubově připojený



$$\mathbf{k}_{ab}^* = \begin{bmatrix} \frac{EA}{l} & 0 & 0 & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^3} & \frac{3EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^2} & \frac{3EI}{l} & 0 & 0 & 0 \\ 0 & 0 & 0 & \frac{EA}{l} & 0 & 0 \\ 0 & \frac{3EI}{l^3} & \frac{3EI}{l^2} & 0 & 0 & 0 \\ 0 & \frac{3EI}{l^2} & \frac{3EI}{l} & 0 & 0 & 0 \end{bmatrix}$$