

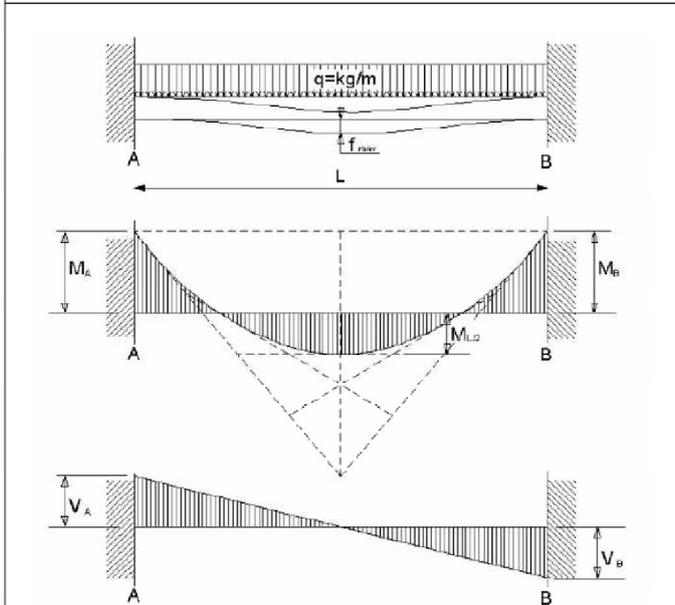
SCHEMA C3

Fixed-supported beam with moment M in B

$$\varphi_B = \frac{M \cdot L}{4 \cdot E \cdot J}$$

$$M_A = \frac{M}{2} \quad M_B = M$$

$$V_A = -V_B = \frac{3 \cdot M}{2 \cdot L}$$



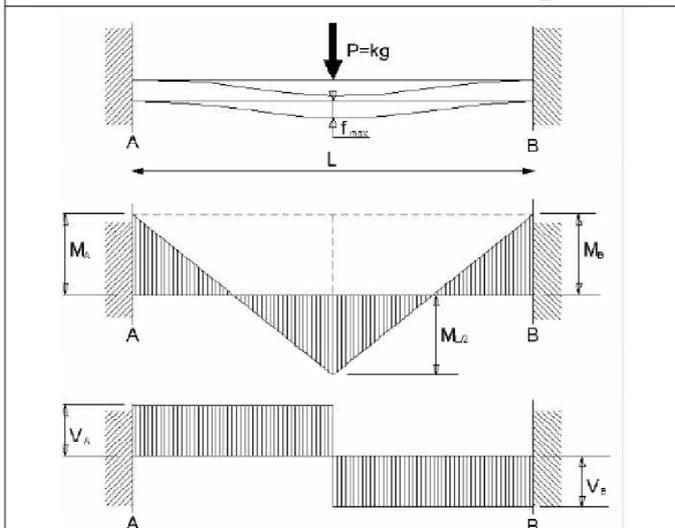
SCHEMA D1

Fixed-fixed beam with uniform load

$$f_{MAX} = \frac{1}{384} \frac{q \cdot L^4}{E \cdot J}$$

$$M_A = M_B = \frac{q \cdot L^2}{12} \quad M_{L/2} = \frac{q \cdot L^2}{24}$$

$$V_A = V_B = \frac{q \cdot L}{2}$$



SCHEMA D2

Fixed-fixed beam with concentrated load in the center

$$f_{MAX} = \frac{2}{384} \frac{P \cdot L^3}{E \cdot J}$$

$$M_A = M_B = \frac{P \cdot L}{8} \quad M_{L/2} = \frac{P \cdot L}{8}$$

$$V_A = V_B = \frac{P}{2}$$