

Formule

$$Q = n \cdot e$$

$$F = \frac{Q_1 Q_2}{4\pi\epsilon_0\epsilon_r r^2}, \quad \frac{F_0}{F} = \epsilon_r$$

$$\varphi = \frac{W}{Q_0}, \quad U_{12} = \varphi_1 - \varphi_2$$

$$\Delta W = W_1 - W_2 = Q_0 \cdot (\varphi_1 - \varphi_2)$$

$$\varphi = \frac{Q}{4\pi\epsilon_0\epsilon_r r}, \quad W = \frac{QQ_0}{4\pi\epsilon_0\epsilon_r r}$$

$$\Delta W = \frac{QQ_0}{4\pi\epsilon_0\epsilon_r} \left(\frac{1}{r_1} - \frac{1}{r_2} \right)$$

Konstante

$$e = +1.6 \cdot 10^{-19} \text{C}, \quad e_0^- = -1.6 \cdot 10^{-19} \text{C}$$

$$\epsilon_0 = 8.85 \cdot 10^{-12} \text{F m}^{-1}$$