



$$Y_{L,C} = \frac{1}{j\omega L} + j\omega C \quad ; \quad Z_{L,C} = \frac{1}{\frac{1}{j\omega L} + j\omega C}$$

$$K_u = \frac{U_2}{U_1} = \frac{\bar{I} \cdot R}{\bar{I} \cdot Z_{L,C}} = \frac{R}{\frac{1}{j\omega L} + j\omega C + R}$$

$$\omega = 2\pi f: \quad \begin{aligned} 10 \text{ Hz} &= 62,8 \text{ rad s}^{-1} \\ 100 \text{ Hz} &= 628 \text{ rad s}^{-1} \\ 1 \text{ kHz} &= 6280 \text{ rad s}^{-1} \end{aligned}$$

$$\omega_r = \frac{1}{\sqrt{LC}} = \frac{1}{\sqrt{5 \cdot 10^{-6}}} = 447,2 \text{ rad s}^{-1}$$