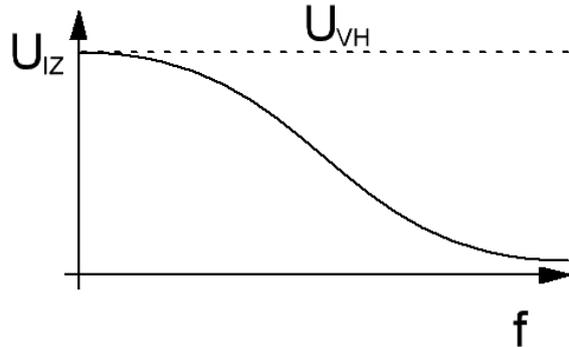
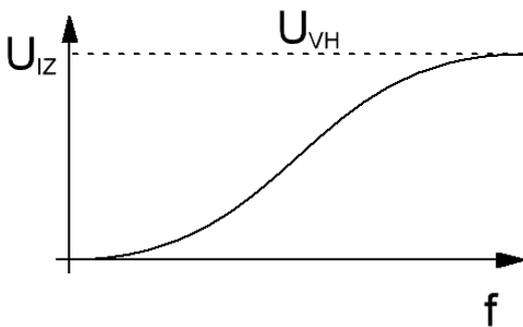
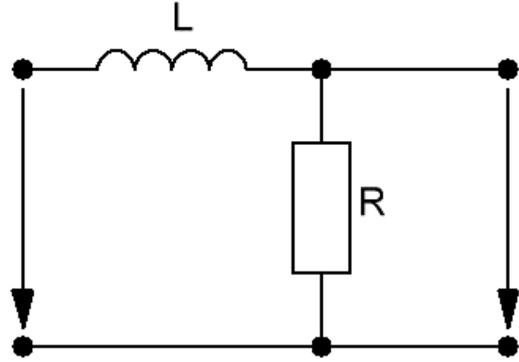
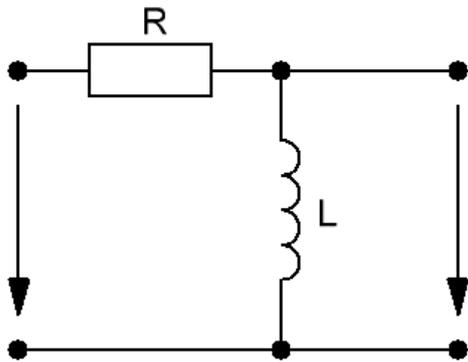
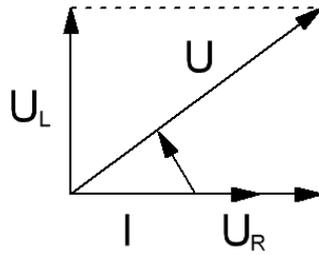


# RL filter



$f = 0$   
 $X_L = 0$

$$U_{izh} = I * X_L = \frac{U_{VH}}{R} * 0 = 0$$

$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + 0}} = \frac{U_{VH}}{R}$$

$f = 0$   
 $X_L = 0$

$$U_{izh} = I * R = \frac{U_{VH}}{R} * R = U_{VH}$$

$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + 0}} = \frac{U_{VH}}{R}$$

$f = \infty$   
 $X_L = \infty$

$$U_{izh} = I * X_L = 0 * \infty$$

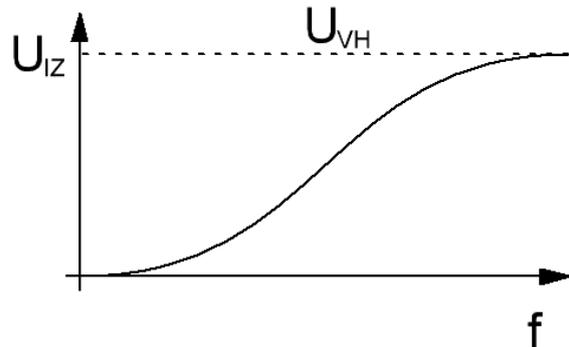
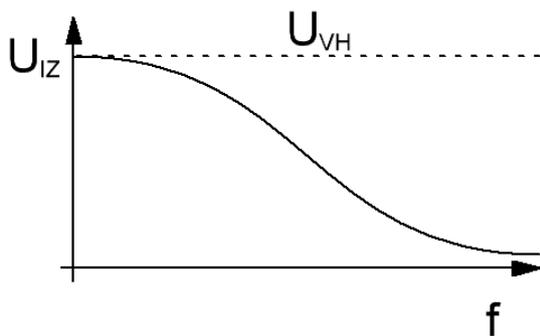
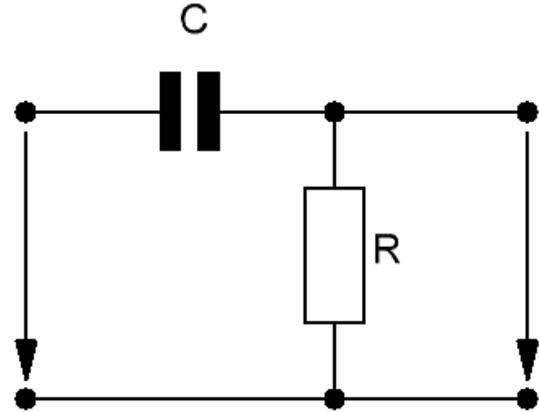
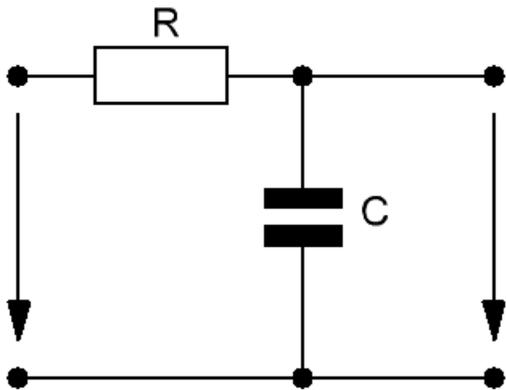
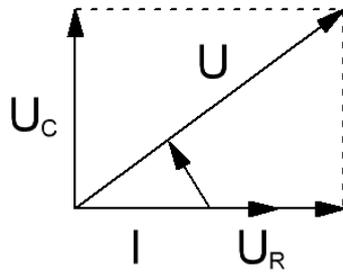
$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + \infty^2}} = \frac{U_{VH}}{\infty} = 0$$

$f = \infty$   
 $X_L = \infty$

$$U_{izh} = I * R = 0 * R = 0$$

$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + \infty^2}} = \frac{U_{VH}}{\infty} = 0$$

# RC filter



$$f = 0$$

$$X_L = \infty$$

$$U_{izh} = I * X_C = 0 * \infty$$

$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + \infty^2}} = \frac{U_{VH}}{\infty} = 0$$

$$f = 0$$

$$X_L = \infty$$

$$U_{izh} = I * R = 0 * R = 0$$

$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + \infty^2}} = \frac{U_{VH}}{\infty} = 0$$

$$f = \infty$$

$$X_L = 0$$

$$U_{izh} = I * X_C = \frac{U_{VH}}{R} * 0 = 0$$

$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + 0}} = \frac{U_{VH}}{R}$$

$$f = \infty$$

$$X_L = 0$$

$$U_{izh} = I * R = \frac{U_{VH}}{R} * R = U_{VH}$$

$$I = \frac{U_{VH}}{Z} = \frac{U_{VH}}{\sqrt{R^2 + 0}} = \frac{U_{VH}}{R}$$

# Pasovno prepustni filter

