

$$\Phi_{21} = K_{21} \cdot \Phi_{11}$$

↓
Kopplfaktor

$$K_{21}: 0 \leq K_{21} \leq 1$$

$$\Phi_{12} = K_{12} \cdot \Phi_{22}$$

$$M_{21} = \frac{w_{21}}{i_1} = \frac{w_2 \cdot K_{21} \cdot \Phi_{11}}{i_1}$$

$$M_{12} = \frac{w_{12}}{i_2} = \frac{w_1 \cdot K_{12} \cdot \Phi_{22}}{i_2} = M_{21} = M$$

bei dieser
Bedingung



$$M_{12} \cdot M_{21} = M^2$$

$$= \underbrace{\frac{w_1 \cdot \Phi_{11}}{i_1}}_{L_1} \cdot \underbrace{\frac{w_2 \cdot \Phi_{22}}{i_2}}_{L_2} \cdot K_{12} \cdot K_{21}$$

$$M^2 = L_1 \cdot L_2 \cdot K_{12} \cdot K_{21}$$

$$M = \sqrt{L_1 \cdot L_2} \cdot \sqrt{K_{12} \cdot K_{21}}$$

$$K = \sqrt{K_{21} \cdot K_{12}}$$

$\sqrt{L_1 L_2} \rightarrow$ geometrisches
Mittel