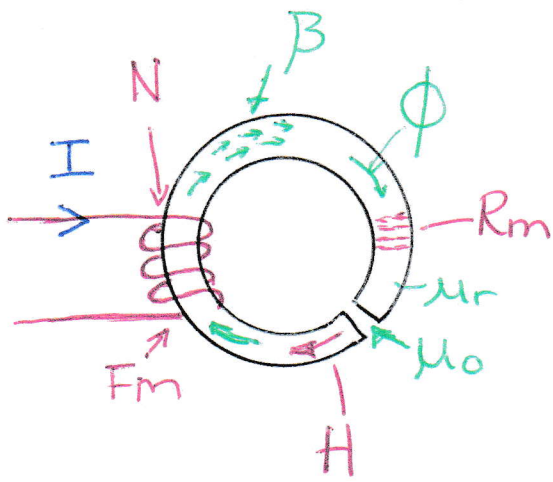


Segulfræði



I = Stráumur [A]

N = Vatningatala (vindingafjöldi)

β = Segulþéttleiki [T]

ϕ = Segulflæði [wb]

R_m = Segulviðnám $\left[\frac{1}{\text{henri}}\right]$ [H⁻¹]

μ_r = Segulleiðni efnis

μ_0 = Segulleiðni í lofti (lofttæmi)

μ = Heildar segulleiðni

$$\mu = \mu_r \cdot \mu_0$$

H = Segulstyrkur [A/m]

F_m = Ampervindingatala [A]

L = SPAN [H]

l = lengd spólu [m] (úmmál spólu)

Formúlur

A = flatarmál spólu [m²]

$$L = \frac{N^2 \cdot A \cdot \mu}{l} = [H]$$

$$F_m = I \cdot N = [A]$$

$$\beta = \frac{\phi}{A} = [T] \quad \text{eða} \quad \beta = \frac{\mu \cdot I \cdot N}{l} = [T]$$

$$R_m = \frac{l}{\mu \cdot A} = \left[\frac{1}{H}\right]$$

$$\mu = \mu_r \cdot \mu_0$$

$$H = \frac{\beta}{\mu} = [A/m] \quad \text{eða} \quad H = \frac{I \cdot N}{l} = [A/m]$$