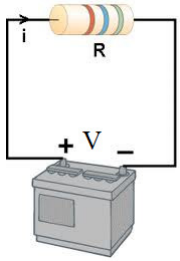
Lei de Ohm
Potência

Lei de Ohm

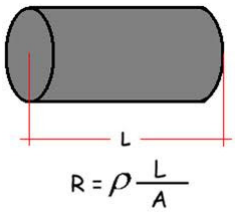
$$i = \frac{dq}{dt} \quad \Leftrightarrow \quad q = \int i\,dt$$

i=constante: $i = \frac{q}{\Delta t} \quad \Leftrightarrow \quad q = i\,\Delta t$

Lei de Ohm: $\Delta V = R\,i$



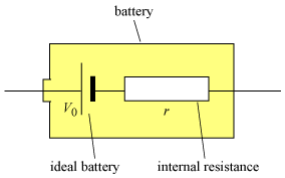
Resistência de um fio condutor:



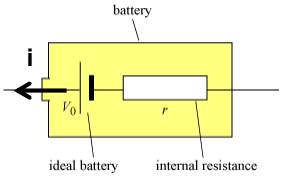
Resistividade:

$$\rho = \rho_0 + \alpha\,\rho_0\,(T - T_0)$$

Carga e descarga de baterias

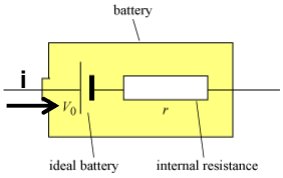


Descarga:



$$V = V_0 - r\,i$$

Carga:



$$V = V_0 + r\,i$$

Potência

$$P = \frac{dU}{dt} \quad \Leftrightarrow \quad U = \int P\,dt$$

P=constante: $P = \frac{\Delta U}{\Delta t} \quad \Leftrightarrow \quad U = P\,\Delta t$

$$P = \frac{\Delta U}{\Delta t} \quad \Leftrightarrow \quad P = \frac{q\,\Delta V}{\Delta t} \quad \Leftrightarrow \quad P = \Delta V\,i$$

$$P = V\,i = R\,i^2 = \frac{V^2}{R}$$