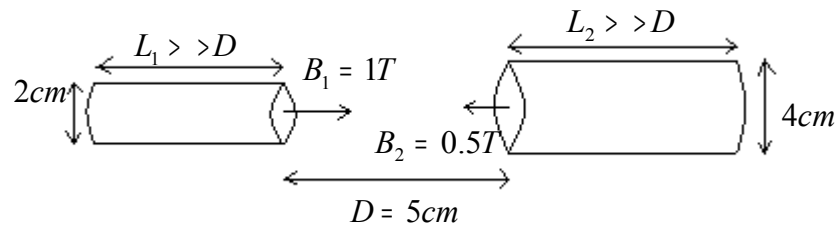


Force Between Two Magnets

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See Unified Absolute Relativity Theory at:

www.wbabin.net/saraiva/saraiva105.pdf
www.wbabin.net/saraiva/saraiva223.pdf
www.wbabin.net/saraiva/saraiva282.pdf



Magnetic charge:

$$Q_{m1} = B_1 \pi R_1^2 \quad ; \quad Q_{m2} = B_2 \pi R_2^2$$

$$Q_{m1} = 3.14 \times 10^{-4} \text{Weber} \quad ; \quad Q_{m2} = 6.28 \times 10^{-4} \text{Weber}$$

Magnetic force:

$$F = \frac{Q_{m1} \cdot Q_{m2}}{\mu_0 D^2} = 62.8N = 6.4kg$$

$L_1 \gg D$ and $L_2 \gg D$ so the charges are like monopoles.

Magnetic force for dipoles -- $L_1 \leq D; L_2 \leq D$:

$$F = \frac{Q_{m1} \cdot Q_{m2}}{\mu_0} \frac{\sqrt{L_1 L_2}}{D^3} \quad \text{and} \quad L_1 = L_2 = 1\text{cm}$$

$$F = 12.6N = 1.3kg$$