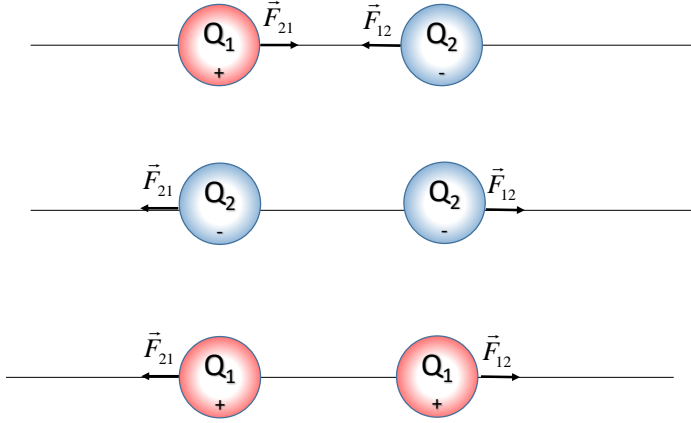
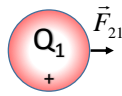
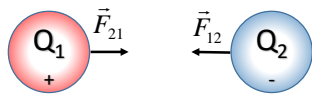


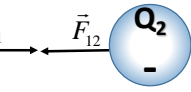
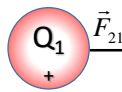
De wet van Coulomb



De wet van Coulomb



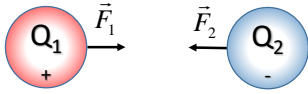
$$|F| \sim \frac{1}{r^2}$$



$$|F| \sim |Q_1| \cdot |Q_2|$$

Q_2 is hier groter dan Q_1

De wet van Coulomb

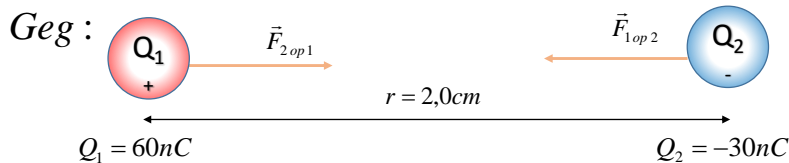


$$|F_1| = |F_2| = k \cdot \frac{|Q_1| \cdot |Q_2|}{r^2}$$

$$k = 8,99 \cdot 10^9 \frac{N \cdot m^2}{C^2} \quad (\text{afhankelijk van de middenstof})$$

De wet van Coulomb

Oefening: Een positieve lading van 60 nC bevindt zich op een afstand van 2,0 cm van een negatieve lading van -30 nC. Bereken de grootte van de kracht die de ladingen op elkaar uitoefenen.



Gev : F ?

Opl : $|F_1| = |F_2| = k \cdot \frac{|Q_1| \cdot |Q_2|}{r^2}$

$$|F_1| = |F_2| = 8,99 \cdot 10^9 \frac{N \cdot m^2}{C^2} \cdot \frac{60 \cdot 10^{-9} C \cdot 30 \cdot 10^{-9} C}{(2,0 \cdot 10^{-2})^2} \quad |F_1| = |F_2| = 0,040 N$$