

Common Symbols

DISCLAIMER

This is not an exhaustive list, and people aren't always consistent in their notation (eg. Φ_E is *electric flux* may not apply to the situation you're dealing with.). The idea was to give you something to jog your memory. The SI units I list *are* accurate for the named quantity (eg. electric field in N/C), but again, people don't always use standard SI units. Use these at your own risk.

Chapter 19: Electric Forces and Electric Fields

Symbol	Name	SI units	other unit names
F	Force	kg m/s ²	N
q	Charge	C (coulombs)	
E	Electric field	kg m/s ² C	N/C = V/m
Φ_E	Electric flux	kg m ³ /s ² C	N m ² /C
A	Area vector	m ²	
ρ (rho)	Charge per unit volume	C/m ³	
σ (sigma)	Charge per unit area	C/m ²	
λ (lambda)	Charge per unit length	C/m	

Chapter 20: Electric Potential and Capacitance

Symbol	Name	SI units	other unit names
U	Potential energy	kg m ² /s ²	J
V	Electric potential	kg m ² /s ² C	V = J/C
C	Capacitance	C ² s ² / kg m ²	F = C/V
κ (kappa)	Dielectric constant	Unitless	