

Fundamental Physical Constants — Electromagnetic constants

Quantity	Symbol	Value	Unit	Relative std. uncert. u_r
elementary charge	e	$1.602\,176\,53(14) \times 10^{-19}$	C	8.5×10^{-8}
	e/h	$2.417\,989\,40(21) \times 10^{14}$	A J ⁻¹	8.5×10^{-8}
magnetic flux quantum $h/2e$	Φ_0	$2.067\,833\,72(18) \times 10^{-15}$	Wb	8.5×10^{-8}
conductance quantum $2e^2/h$	G_0	$7.748\,091\,733(26) \times 10^{-5}$	S	3.3×10^{-9}
inverse of conductance quantum	G_0^{-1}	12 906.403 725(43)	Ω	3.3×10^{-9}
Josephson constant ¹ $2e/h$	K_J	$483\,597.879(41) \times 10^9$	Hz V ⁻¹	8.5×10^{-8}
von Klitzing constant ² $h/e^2 = \mu_0 c/2\alpha$	R_K	25 812.807 449(86)	Ω	3.3×10^{-9}
Bohr magneton $e\hbar/2m_e$ in eV T ⁻¹	μ_B	$927.400\,949(80) \times 10^{-26}$	J T ⁻¹	8.6×10^{-8}
		$5.788\,381\,804(39) \times 10^{-5}$	eV T ⁻¹	6.7×10^{-9}
	μ_B/h	$13.996\,2458(12) \times 10^9$	Hz T ⁻¹	8.6×10^{-8}
	μ_B/hc	46.686 4507(40)	m ⁻¹ T ⁻¹	8.6×10^{-8}
	μ_B/k	0.671 7131(12)	K T ⁻¹	1.8×10^{-6}
nuclear magneton $e\hbar/2m_p$ in eV T ⁻¹	μ_N	$5.050\,783\,43(43) \times 10^{-27}$	J T ⁻¹	8.6×10^{-8}
		$3.152\,451\,259(21) \times 10^{-8}$	eV T ⁻¹	6.7×10^{-9}
	μ_N/h	7.622 593 71(65)	MHz T ⁻¹	8.6×10^{-8}
	μ_N/hc	$2.542\,623\,58(22) \times 10^{-2}$	m ⁻¹ T ⁻¹	8.6×10^{-8}
	μ_N/k	$3.658\,2637(64) \times 10^{-4}$	K T ⁻¹	1.8×10^{-6}

¹ See the “Adopted values” table for the conventional value adopted internationally for realizing representations of the volt using the Josephson effect.

² See the “Adopted values” table for the conventional value adopted internationally for realizing representations of the ohm using the quantum Hall effect.