

Fundamental Physical Constants — Electromagnetic constants

Quantity	Symbol	Value	Unit	Relative std. uncert. u_r
elementary charge	e	$1.602\,176\,487(40) \times 10^{-19}$	C	2.5×10^{-8}
	e/h	$2.417\,989\,454(60) \times 10^{14}$	A J ⁻¹	2.5×10^{-8}
magnetic flux quantum $h/2e$	Φ_0	$2.067\,833\,667(52) \times 10^{-15}$	Wb	2.5×10^{-8}
conductance quantum $2e^2/h$	G_0	$7.748\,091\,7004(53) \times 10^{-5}$	S	6.8×10^{-10}
inverse of conductance quantum	G_0^{-1}	12 906.403 7787(88)	Ω	6.8×10^{-10}
Josephson constant ¹ $2e/h$	K_J	$483\,597.891(12) \times 10^9$	Hz V ⁻¹	2.5×10^{-8}
von Klitzing constant ² $h/e^2 = \mu_0 c/2\alpha$	R_K	25 812.807 557(18)	Ω	6.8×10^{-10}
Bohr magneton $e\hbar/2m_e$ in eV T ⁻¹	μ_B	$927.400\,915(23) \times 10^{-26}$	J T ⁻¹	2.5×10^{-8}
		$5.788\,381\,7555(79) \times 10^{-5}$	eV T ⁻¹	1.4×10^{-9}
	μ_B/h	$13.996\,246\,04(35) \times 10^9$	Hz T ⁻¹	2.5×10^{-8}
	μ_B/hc	46.686 4515(12)	m ⁻¹ T ⁻¹	2.5×10^{-8}
	μ_B/k	0.671 7131(12)	K T ⁻¹	1.7×10^{-6}
nuclear magneton $e\hbar/2m_p$ in eV T ⁻¹	μ_N	$5.050\,783\,24(13) \times 10^{-27}$	J T ⁻¹	2.5×10^{-8}
		$3.152\,451\,2326(45) \times 10^{-8}$	eV T ⁻¹	1.4×10^{-9}
	μ_N/h	7.622 593 84(19)	MHz T ⁻¹	2.5×10^{-8}
	μ_N/hc	$2.542\,623\,616(64) \times 10^{-2}$	m ⁻¹ T ⁻¹	2.5×10^{-8}
	μ_N/k	$3.658\,2637(64) \times 10^{-4}$	K T ⁻¹	1.7×10^{-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.