

CNST	Constants MENU (ASM) - cat : CNST	Important scientific and technical constant values	Category: Catalog
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line scrolling indicator : Λ V

Menu	CNST	1	2	3	4	5	6
3	gShifted	μ_e	μ_e/μ_B	μ_n	μ_p	μ_u	μ_μ
2	fShifted	ϵ_0	λ_c	λ_{cn}	λ_{cp}	μ_0	μ_B
1	primary	Z_0	α	γ	γ_{EM}	γ_p	$\Delta\nu_{Cs}$
Page	4	F1	F2	F3	F4	F5	F6

Info Constants preceded by "# " in programs ; Type characters 1-2 to search ; T1 (temporary info) is shown in extended description

CNST	Page 4	Full name	Extended description	Type	Flag name	Additional information	Catalog	Default	Status
F1	Z ₀	Characteristic impedance of vacuum	imped.vac Z ₀ = +3.767303134617700000000000000203193 × 10 ²	Constant (#54)		Unit : Ω			
F2	α	Fine-structure constant	c.finestruc α = +7.2973525693 × 10 ⁻³	Constant (#55)					
F3	γ	Newtonian constant of gravitation	c.grav.nwt γ = +6.6743 × 10 ⁻¹¹	Constant (#56)		Unit : m ³ /kg.s ²			
F4	γ _{EM}	Euler-Mascheroni constant	c.eul.masc γ _{EM} = +5.772156649015320000000000000824024 × 10 ⁻¹	Constant (#57)					
F5	γ _p	Proton gyromagnetic ratio	r.gyro.prot γ _p = +2.6752218744 × 10 ⁹	Constant (#58)					
F6	Δν _{Cs}	Hyperfine transition frequency of ¹³³ Cs	frq.hypf.cs Δν _{Cs} = +9.19263177 × 10 ⁹	Constant (#59)		Unit : Hz			

fShifted F1	ε ₀	Vacuum electric permittivity	epermt.vac ε ₀ = +8.8541878128 × 10 ⁻¹²	Constant (#60)		Unit : As/Vm			
fShifted F2	λ _c	Compton wavelength of the electron	wavln.elec λ _c = +2.42631023867 × 10 ⁻¹²	Constant (#61)		Unit : m			
fShifted F3	λ _{cn}	Compton wavelength of the neutron	wavln.neu λ _{cn} = +1.31959090581 × 10 ⁻¹⁵	Constant (#62)		Unit : m			
fShifted F4	λ _{cp}	Compton wavelength of the proton	wavln.prot λ _{cp} = +1.32140985539 × 10 ⁻¹⁵	Constant (#63)		Unit : m			
fShifted F5	μ ₀	Vacuum magnetic permeability	mpermb.vac μ ₀ = +1.25663706212 × 10 ⁻⁶	Constant (#64)		Unit : Vs/Am			
fShifted F6	μ _B	Bohr's magneton	magn.both μ _B = +9.274010078 × 10 ⁻²⁴	Constant (#65)		Unit : J/T			

gShifted F1	μ _e	Electron magnetic moment	mgmom.elec μ _e = -9.2847647043 × 10 ⁻²⁴	Constant (#66)		Unit : J/T			
gShifted F2	μ _e /μ _B	Electron magnetic moment / Bohr's magneton	r.elec.bohr μ _e /μ _B = -1.00115965218128	Constant (#67)					
gShifted F3	μ _n	Neutron magnetic moment	mgmom.neu μ _n = -9.662365 × 10 ⁻²⁷	Constant (#68)		Unit : J/T			
gShifted F4	μ _p	Proton magnetic moment	mgmom.prot μ _p = +1.41060679736 × 10 ⁻²⁶	Constant (#69)		Unit : J/T			
gShifted F5	μ _u	Nuclear magneton	magn.nucl μ _u = +5.0507837461 × 10 ⁻²⁷	Constant (#70)		Unit : J/T			
gShifted F6	μ _μ	Muon magnetic moment	mgmom.muon μ _μ = -4.4904483 × 10 ⁻²⁶	Constant (#71)		Unit : J/T			