

Magnetic units

Name		SI units		CGS units	
B	Magnetic induction	T	Tesla	G	Gauss
H	Coercivity	A/m	Ampere/Meter	Oe	Oersted
BxH	Magnetic energy	J/m³	Joule/Meter ³	GxOe	Gauss x Oersted
φ	Magnetic flux	Wb Vs	Weber Voltsecond	M	Maxwell
μ_o	Permanent permeability	T A/m	<u>Tesla</u> Ampere/Meter	G Oe	<u>Gauss</u> Oersted

B	T	= Tesla	0,1	0,5	1,0	1,5
	mT	= Millitesla	100	500	1000	1500
	G	= Gauss	1000	5000	10000	15000
	10 ⁻⁸ Vs/cm ²	= Voltsecond/cm ²	1000	5000	10000	15000

H	kA/m	= Kiloampere/meter	20	100	200	300
	A/m	= Ampere/meter	2x10 ⁴	10 ⁵	2x10 ⁵	3x10 ⁵
	A/cm	= Ampere/centimetre	200	1000	2000	3000
	Oe	= Oersted	250	1250	2500	3750

BxH	kJ/m ³	= Kilojoules/meter ³	8	16	24	32	40	48	56
	mWs/cm ³	= Milliwatt second/cm ³	8	16	24	32	40	48	56
	10 ⁸ G x Oe	= Gauss x Oersted	1	2	3	4	5	6	7

φ	Wb	= Weber	10 ⁻⁸	10 ⁻⁷	10 ⁻⁶	10 ⁻⁵	10 ⁻⁴	10 ⁻³	10 ⁻²	10 ⁻¹	1
	mWb	= Milliweber					0.1	1	10	10 ²	10 ³
	M	= Maxwell	1	10	10 ²	10 ³	10 ⁴	10 ⁵	10 ⁶	10 ⁷	10 ⁸

μ_o × μ_p	Mü Null x Mü Permanent	<u>mT</u> kA/m	0.5	1	1.5	2	2.5	3	3.5	4	4.5
μ_p	Mü Permanent	<u>G</u> Oe			1.2			2.4			3.6