

## UNIT OF MEASURE SYSTEMS

Unit	Symbol	cgs System	SI System	English System
Flux	$\Phi$	Maxwell	weber	Maxwell
Flux Density	B	Gauss	Tesla	lines/in <sup>2</sup>
Magnetomotive Force	F	Gilbert	ampere turn	ampere turn
Magnetizing force	H	Oersted	ampere	ampere turns/in
Length	L	cm	m	in
Permeability of a Vacuum	$\mu_v$	1	$0.4\pi \times 10^{-6}$	3

## CONVERSION FACTORS

Multiply	By	To obtain
inches	2.54	centimeters
lines/in <sup>2</sup>	0.155	Gauss
Gauss	6.45	lines/in <sup>2</sup>
Gauss	$10^{-4}$	Tesla
Gilberts	0.79577	ampere turns
Oersteds	79.577	ampere turns/m
Ampere turns	$0.4\pi$	Gilberts
Ampere Turns/in	0.495	Oersteds
Ampere turns/in	39.37	Ampere turns/m