

SYMBOLS AND UNITS

Symbols for physical quantities are printed in italics, while symbols for units are printed in roman type. You will find a good treatment of this subject in the AIP Style Manual. As an aid we have prepared a table of the most commonly used units and their abbreviations (Appendix 1). Most symbols for units are printed in lower case roman type without full stops. Symbols for units derived from proper names are written with initial capital letters, e.g., coulomb (C), weber (Wb), watt (W). Most units have a single form for both singular and plural, i.e., 1.0 cm and 3.2 cm. The abbreviation of the symbol must be used after a number given in numerals, i.e., 1 cm (not 1 centimetre), but the unit is written out in cases like 'a few centimetres'. The number is separated from the unit and followed by a full space. Some units are not spaced off from the number, e.g., 1%, 1°C.

ROMAN OR ITALIC TYPE?

The same symbol always appears in the same way, irrespective of whether it is

- capital or lower case;
- on the main line, superscript, or subscript.
Common terms in **roman** type are
- symbols for **units** (m for metre, kg for kilogram, V for volt, Hz for hertz), BUT in GeV/*c*, the *c* representing the velocity of light should be italic;
- names of **particles** (p for proton, K for kaon, e for electron);
- names of **chemicals** (Ne for neon, Ar for argon, C for carbon, etc.—note capitals for the symbol, but lower case for the full name.);
- **mathematical abbreviations** (sin, det, Re, Im, lim, curl, dx, const);
- (un)conventional **abbreviations** that are **initials** or **bits** of words (exp. for experimental, min. for minimum, eff. for effective, stat. for statistical, syst. for systematic, etc.). Note, however, that when abbreviations are used in equations as subscripts or superscripts there is no full stop.
- **all numbers**
- names of **waves or states** (p, s, ..., P, S, ...) and **covariant couplings** (A for axial, V for vector, etc.), names of **monopoles** (E, M for electric and magnetic);
- all things that *cannot* be replaced by a number.

All **variables** are in *italics*.

BEWARE

ROMAN	ITALIC
p = proton	<i>p</i> = momentum or pressure
m = metre	<i>m</i> = mass
H = hydrogen, henry	<i>H</i> = Hamiltonian or magnetic field strength
V = volt	<i>V</i> = volume
F = farad	<i>F</i> = Faraday constant
T = tesla	<i>T</i> = temperature
t = tonne	<i>t</i> = time
l = litre	<i>l</i> = length
s = second	<i>s</i> = (c.m. energy) (mostly found as \sqrt{s})
L = heavy lepton	<i>L</i> = luminosity