The \texttt{physunits} package\footnote{This document corresponds to \texttt{physunits v1.0.4}, dated 2020/03/26.}

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1 Introduction

This package consists of several macros that are shorthand for a variety of physical units that are commonly used in introductory level physics and astronomy classes.

At present, this package provides some similar units to those in \texttt{siunitx}, but is uses slightly different macro names for each. This package also provides a number of non-SI units (e.g. erg, cm, BTU).

2 Prerequisites / Dependencies

2.1 General

This package requires the \texttt{physunits} package.

2.2 Generating Documentation

The \texttt{hyperref} package are required to generate the documentation (this file) for this package.
3 Acknowledgements

The author would like to thank Brian Dunn for catching bugs in the temperature units and kcal, leading to changes in v1.0.4.

4 Bug Reporting

Please report bugs or issues in this package using github, at https://github.com/astrobit/physunits/issues.

5 Naming Convention

most macros consist of just the commonly used letter or unit, e.g. \m for meters. In cases where the simple form of the unit conflicts with an existing \LaTeX macro, then the full word is used, starting with a upper-case letter, e.g. \Coulomb.

One notable exception to the above naming convention is the use of \gm for grams, instead of \g or \Gram.

6 Base and Prefixes

Most units are in the base unit only, but some very commonly used prefixes are available as part of the macro, e.g. \kg for kilogram, \cm for centimeter. For base units, each macro accepts one option that can be used to specify the prefix, for example \m[n] will result in nm. The macros enforce math mode, so \m[\micro] will result in $\mu$m.

7 Macro Usage

7.1 Special Macros

\units@separator is a special macro used to set the spacing between a quantity and the associated units.

\micro is a special macro that can be used for the prefix $\mu$ (micro-). Internally it just uses \mu.
7.2 Electricity & Magnetism

\textbf{\textbackslash V} \textbackslash V is a macro for Volts (V). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Volt} \textbackslash Volt is a macro for Volts (V). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Coulomb} \textbackslash Coulomb is a macro for Coulombs (C). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash esu} \textbackslash esu is a macro for electrostatic units (esu), the units of charge in Gaussian cgs.

\textbf{\textbackslash Ohm} \textbackslash Ohm is a macro for Ohms (\Omega). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Amp} \textbackslash Amp is a macro for Amperes (A). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Farad} \textbackslash Farad is a macro for Farads (F). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Tesla} \textbackslash Tesla is a macro for Teslas (T). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Gauss} \textbackslash Gauss is a macro for Gauss (G), the units for magnetic field strength in Gaussian cgs. This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Henry} \textbackslash Henry is a macro for Henrys (H). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

7.3 Energy

\textbf{\textbackslash eV} \textbackslash eV is a macro for electron Volts (eV). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash keV} \textbackslash keV is a macro for kilo-electron Volts (keV).

\textbf{\textbackslash MeV} \textbackslash MeV is a macro for mega-electron Volts (MeV).

\textbf{\textbackslash J} \textbackslash J is a macro for Joules (J). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbf{\textbackslash Joule} \textbackslash Joule is a macro for Joules (J). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\texttt{\textbackslash erg} \texttt{\textbackslash erg} is a macro for ergs (erg), the unit of energy in cgs.
\texttt{\textbackslash kcal} \texttt{\textbackslash kcal} is a macro for kilo-calories (kcal).
\texttt{\textbackslash Cal} \texttt{\textbackslash Cal} is a macro for kilo-calories (Cal).
\texttt{\textbackslash calorie} \texttt{\textbackslash calorie} is a macro for calories (cal). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\texttt{\textbackslash BTU} \texttt{\textbackslash BTU} is a macro for British Thermal Units (BTU).
\texttt{\textbackslash tnt} \texttt{\textbackslash tnt} is a macro for tons of TNT.

7.4 Power

\texttt{\textbackslash Watt} \texttt{\textbackslash Watt} is a macro for Watts (W). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\texttt{\textbackslash hpi} \texttt{\textbackslash hpi} is a macro for Imperial Horsepower (hp(I)).
\texttt{\textbackslash hp} \texttt{\textbackslash hp} is a macro for Metric Horsepower (hp(M)).
\texttt{\textbackslash hp} \texttt{\textbackslash hp} is a macro for Horsepower (hp).

7.5 Distance

\texttt{\textbackslash meter} \texttt{\textbackslash meter} is a macro for meters (m). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\texttt{\textbackslash m} \texttt{\textbackslash m} is a macro for meters (m). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\texttt{\textbackslash km} \texttt{\textbackslash km} is a macro for kilometers (km).
\texttt{\textbackslash au} \texttt{\textbackslash au} is a macro for astronomical units (au).
\texttt{\textbackslash pc} \texttt{\textbackslash pc} is a macro for parsecs (pc). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\texttt{\textbackslash ly} \texttt{\textbackslash ly} is a macro for light-years (ly). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\texttt{\textbackslash cm} \texttt{\textbackslash cm} is a macro for centimeters (cm).
\texttt{\textbackslash nm} \texttt{\textbackslash nm} is a macro for nanometers (nm).
\ft \textit{ft} is a macro for feet (ft).
\inch \textit{inch} is a macro for inches (in).
\mi \textit{mi} is a macro for miles (mi).

7.6 Time

\s \textit{s} is a macro for seconds (s). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\Sec \textit{Sec} is a macro for seconds (s). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\Min \textit{Min} is a macro for minutes (m).
\h \textit{h} is a macro for hours (h).
\y \textit{y} is a macro for years (y). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\Day \textit{Day} is a macro for days (d).

7.7 Mass

\gm \textit{gm} is a macro for grams (g). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\kg \textit{kg} is a macro for kilograms (kg).
\lb \textit{lb} is a macro for pounds (weight) (lb).
\amu \textit{amu} is a macro for atomic mass units (amu).

7.8 Force

\N \textit{N} is a macro for Newtons (N). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\Newton \textit{Newton} is a macro for Newtons (N). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\dyne \textit{dyne} is a macro for dynes (dyn). This macro accepts an optional argument for
a prefix. If no option is supplied, no prefix will be prepended.

\lbf \lbf is a macro for pounds of force (lbf).

7.9 Velocity

\kmps \kmps is a macro for kilometers per second (km s\(^{-1}\)).
\kmph \kmph is a macro for kilometers per hour (km h\(^{-1}\)).
\mps \mps is a macro for meters per second (m s\(^{-1}\)). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\miph \miph is a macro for miles per hour (mi h\(^{-1}\)).
\kts \kts is a macro for knots (kts), i.e. nautical miles per hour.

7.10 Acceleration

\mpss \mpss is a macro for acceleration in meters per second squared (m s\(^{-2}\)). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\gacc \gacc is a macro for acceleration due to gravity (g).
\ftpss \ftpss is a macro for acceleration in feet per second squared (ft s\(^{-2}\)).

7.11 Temperature

\K \K is a macro for Kelvin (K). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\Kelvin \Kelvin is a macro for Kelvin (K). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\Celcius \Celcius is a macro for degrees Celcius (°C).
\Rankine \Rankine is a macro for degrees Rankine (°R).
\Fahrenheit \Fahrenheit is a macro for degrees Fahrenheit (°F).
7.12 Angular Velocity

\(\text{\texttt{rpm}}\) is a macro for revolutions per minute \(\text{rev min}^{-1}\).

7.13 Frequency

\(\text{\texttt{Hz}}\) is a macro for Hertz (Hz). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

7.14 Pressure

\(\text{\texttt{barP}}\) is a macro for bar (bar). (The use of \texttt{barP} instead of just \texttt{bar} is due the \LaTeX\ command \texttt{\bar{}}.) This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\(\text{\texttt{atm}}\) is a macro for atmosphere (atm).

\(\text{\texttt{Pa}}\) is a macro for Pascals (Pa). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\(\text{\texttt{mmHg}}\) is a macro for millimeters of mercury (mmHg).

\(\text{\texttt{inHg}}\) is a macro for inches of mercury (inHg).

\(\text{\texttt{lbsi}}\) is a macro for pounds per square inch (psi). (Note that \texttt{\psi} is a \LaTeX\ command for the greek letter \psi\).)

\(\text{\texttt{lbsf}}\) is a macro for pounds per square foot (psf).

\(\text{\texttt{Ba}}\) is a macro for Barre (Ba). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\(\text{\texttt{Torr}}\) is a macro for Torr (Torr). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

7.15 Other

\(\text{\texttt{mol}}\) is a macro for moles (mol).
8 Implementation

8.1 Special

\units@separator \units@separator is a special macro used to set the spacing between a quantity and the associated units.

1 \DeclareRobustCommand{\units@separator}{,}

\micro \micro is a special macro used to typeset the symbol \mu. It is compatible with the \micro in siunitx.

2 \ifx\micro\undefined
3 \DeclareRobustCommand{\micro}{\ensuremath{\mu}}
5 \fi

8.2 Electricity & Magnetism

\V \V is a macro for Volts (V). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

6 \DeclareRobustCommand{\V}[1][]{\ensuremath{\expandafter\units@separator\mathrm{#1V}}}

\Volt \Volt is a macro for Volts (V). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

8 \DeclareRobustCommand{\Volt}[1][]{\ensuremath{\expandafter\units@separator\mathrm{#1V}}}

\Coulomb \Coulomb is a macro for Coulombs (C). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

10 \DeclareRobustCommand{\Coulomb}[1][]{\ensuremath{\expandafter\units@separator\mathrm{#1C}}}

\esu \esu is a macro for electrostatic units (esu).

12 \DeclareRobustCommand{\esu}{\ensuremath{\expandafter\units@separator\mathrm{esu}}}
13 \expandafter\units@separator\mathrm{esu}
\Ohm \Ohm is a macro for Ohms (\Omega). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\Amp \Amp is a macro for Amperes (A). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\Farad \Farad is a macro for Farads (F). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\Tesla \Tesla is a macro for Teslas (T). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\Gauss \Gauss is a macro for Gauss (G). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\Henry \Henry is a macro for Henrys (H). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

8.3 Energy

\eV \eV is a macro for electron Volts (eV). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\textbackslash keV \textbackslash keV is a macro for kilo-electron Volts (keV).

\textbackslash MeV \textbackslash MeV is a macro for mega-electron Volts (MeV).

\textbackslash J \textbackslash J is a macro for Joules (J). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbackslash Joule \textbackslash Joule is a macro for Joules (J). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\textbackslash erg \textbackslash erg is a macro for ergs (erg).

\textbackslash kcal \textbackslash kcal is a macro for kilo-calories (kcal).

\textbackslash Cal \textbackslash Cal is a macro for kilo-calories (Cal).
\texttt{\textbackslash calorie} \texttt{\textbackslash calorie} is a macro for calories (cal). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
42 \DeclareRobustCommand{\calorie}{[1][ ]}{\% 43 \expandafter\units@separator\mathrm{#1cal}}
\end{verbatim}

\texttt{\texttt{\textbackslash BTU} \texttt{\textbackslash BTU} is a macro for British Thermal Units (BTU).}

\begin{verbatim}
45 \DeclareRobustCommand{\BTU}{\% 46 \expandafter\units@separator\mathrm{BTU}}
\end{verbatim}

\texttt{\texttt{\textbackslash tnt} \texttt{\textbackslash tnt} is a macro for tons of TNT).}

\begin{verbatim}
47 \DeclareRobustCommand{\tnt}{\% 48 \expandafter\units@separator\mathrm{ton% 49 \expandafter\units@separator of% 50 \expandafter\units@separator TNT}}}
\end{verbatim}

\section{Power}

\texttt{\texttt{\textbackslash Watt} \texttt{\textbackslash Watt} is a macro for Watts (W). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.}

\begin{verbatim}
51 \DeclareRobustCommand{\Watt}{[1][ ]}{\% 52 \expandafter\units@separator\mathrm{#1W}}}
\end{verbatim}

\texttt{\texttt{\textbackslash hpi} \texttt{\textbackslash hpi} is a macro for Imperial Horsepower (hp(I)).}

\begin{verbatim}
53 \DeclareRobustCommand{\hpi}{\% 54 \expandafter\units@separator\mathrm{hp(I)}}}
\end{verbatim}

\texttt{\texttt{\textbackslash hpi} \texttt{\textbackslash hpi} is a macro for Metric Horsepower (hp(M)).}

\begin{verbatim}
55 \DeclareRobustCommand{\hpm}{\% 56 \expandafter\units@separator\mathrm{hp(M)}}}
\end{verbatim}

\texttt{\texttt{\textbackslash hp} \texttt{\textbackslash hp} is a macro for Horsepower (hp).}

\begin{verbatim}
57 \DeclareRobustCommand{\hp}{\% 58 \expandafter\units@separator\mathrm{hp}}}
8.5 Distance

\texttt{\textbackslash meter} \textit{\textbackslash meter} is a macro for meters (m). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
59 \DeclareRobustCommand{\meter}{[1][ ]}{\ensuremath{\expandafter\units@separator\mathrm{#1m}}}
\end{verbatim}

\texttt{\textbackslash m} \textit{\textbackslash m} is a macro for meters (m). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
61 \DeclareRobustCommand{\m}{[1][ ]}{\ensuremath{\expandafter\units@separator\mathrm{#1m}}}
\end{verbatim}

\texttt{\textbackslash km} \textit{\textbackslash km} is a macro for kilometers (km).

\begin{verbatim}
63 \DeclareRobustCommand{\km}{\ensuremath{\expandafter\units@separator\mathrm{km}}}
\end{verbatim}

\texttt{\textbackslash au} \textit{\textbackslash au} is a macro for astronomical units (au).

\begin{verbatim}
65 \DeclareRobustCommand{\au}{\ensuremath{\expandafter\units@separator\mathrm{au}}}
\end{verbatim}

\texttt{\textbackslash pc} \textit{\textbackslash pc} is a macro for parsecs (pc). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
67 \DeclareRobustCommand{\pc}{[1][ ]}{\ensuremath{\expandafter\units@separator\mathrm{pc}}}
\end{verbatim}

\texttt{\textbackslash ly} \textit{\textbackslash ly} is a macro for light-years (ly). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
69 \DeclareRobustCommand{\ly}{[1][ ]}{\ensuremath{\expandafter\units@separator\mathrm{ly}}}
\end{verbatim}

\texttt{\textbackslash cm} \textit{\textbackslash cm} is a macro for centimeters (cm).

\begin{verbatim}
71 \DeclareRobustCommand{\cm}{\ensuremath{\expandafter\units@separator\mathrm{cm}}}
72 \expandafter\units@separator\mathrm{cm}})
\end{verbatim}
\nm \ nm is a macro for nanometers (nm).
\begin{verbatim}
73 \DeclareRobustCommand{\nm}{\ensuremath{\expandafter\units@separator\mathrm{nm}}}
\end{verbatim}
\ft \ ft is a macro for feet (ft).
\begin{verbatim}
75 \DeclareRobustCommand{\ft}{\ensuremath{\expandafter\units@separator\mathrm{ft}}}
\end{verbatim}
\inch \ inch is a macro for inches (in).
\begin{verbatim}
77 \DeclareRobustCommand{\inch}{\ensuremath{\expandafter\units@separator\mathrm{in}}}
\end{verbatim}
\mi \ mi is a macro for miles (mi).
\begin{verbatim}
79 \DeclareRobustCommand{\mi}{\ensuremath{\expandafter\units@separator\mathrm{mi}}}
\end{verbatim}

8.6 Time
\s \ s is a macro for seconds (s). This macro accepts an optional argument for a
prefix. If no option is supplied, no prefix will be prepended.
\begin{verbatim}
81 \DeclareRobustCommand{\s}[1]{\ensuremath{\expandafter\units@separator\mathrm{#1s}}}
\end{verbatim}
\Sec \ Sec is a macro for seconds (s). This macro accepts an optional argument for a
prefix. If no option is supplied, no prefix will be prepended.
\begin{verbatim}
83 \DeclareRobustCommand{\Sec}[1]{\ensuremath{\expandafter\units@separator\mathrm{#1s}}}
\end{verbatim}
\min \ min is a macro for minutes (m).
\begin{verbatim}
85 \DeclareRobustCommand{\min}{\ensuremath{\expandafter\units@separator\mathrm{min}}}
\end{verbatim}
\h \ h is a macro for hours (h).
\y \ y is a macro for years (y). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\Day \ Day is a macro for days (d).

8.7 Mass

\gm \ gm is a macro for grams (g). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\kg \ kg is a macro for kilograms (kg).

\lb \ lb is a macro for pounds (weight) (lb).

\amu \ amu is a macro for atomic mass units (amu).
8.8 Force

$N$ is a macro for Newtons (N). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
\DeclareRobustCommand{\N}[1][ ]{\ensuremath{\expandafter\units@separator\mathrm{#1N}}}
\end{verbatim}

$\textbf{Newton}$ $\textbf{Newton}$ is a macro for Newtons (N). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
\DeclareRobustCommand{\Newton}[1][ ]{\ensuremath{\expandafter\units@separator\mathrm{#1N}}}
\end{verbatim}

$\textbf{dyne}$ $\textbf{dyne}$ is a macro for dynes (dyn). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
\DeclareRobustCommand{\dyne}[1][ ]{\ensuremath{\expandafter\units@separator\mathrm{#1dyn}}}
\end{verbatim}

$\textbf{lbf}$ $\textbf{lbf}$ is a macro for pounds of force (lbf).

\begin{verbatim}
\DeclareRobustCommand{\lbf}{\ensuremath{\expandafter\units@separator\mathrm{lbf}}}
\end{verbatim}

8.9 Velocity

$\textbf{\kmps}$ $\textbf{\kmps}$ is a macro for kilometers per second (km s$^{-1}$).

\begin{verbatim}
\DeclareRobustCommand{\kmps}{\ensuremath{\expandafter\units@separator\mathrm{km}s^{-1}}}
\end{verbatim}

$\textbf{\kmph}$ $\textbf{\kmph}$ is a macro for kilometers per hour (km h$^{-1}$).

\begin{verbatim}
\DeclareRobustCommand{\kmph}{\ensuremath{\expandafter\units@separator\mathrm{km}h^{-1}}}
\end{verbatim}

$\textbf{\mps}$ $\textbf{\mps}$ is a macro for meters per second (m s$^{-1}$). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\begin{verbatim}
\DeclareRobustCommand{\mps}[1][ ]{\ensuremath{\expandafter\units@separator\mathrm{#1m}s^{-1}}}
\end{verbatim}
\miph \miph is a macro for miles per hour (mi h\(^{-1}\)).

\kts \kts is a macro for knots (kts).

\section*{8.10 Acceleration}
\mpss \mpss is a macro for acceleration in meters per second squared (m s\(^{-2}\)). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\gacc \gacc is a macro for acceleration due to gravity (g).

\ftpss \ftpss is a macro for acceleration in feet per second squared (ft s\(^{-2}\)).

\section*{8.11 Temperature}
\K \K is a macro for Kelvin (K). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
\DeclareRobustCommand\Kelvin{\ensuremath{\expandafter\units@separator\mathrm{#1K}}}

\Kelvin \Kelvin is a macro for Kelvin (K). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\DeclareRobustCommand\Celcius{\ensuremath{\expandafter\units@separator{}\circ\mathrm{C}}}

\Celcius \Celcius is a macro for degrees Celcius (°C).

\DeclareRobustCommand\Rankine{\ensuremath{\expandafter\units@separator{}\circ\mathrm{R}}}

\Rankine \Rankine is a macro for degrees Rankine (°R).

\DeclareRobustCommand\Fahrenheit{\ensuremath{\expandafter\units@separator{}\circ\mathrm{F}}}

\Fahrenheit \Fahrenheit is a macro for degrees Fahrenheit (°F).

8.12 Angular Velocity

\DeclareRobustCommand\rpm{\ensuremath{\expandafter\units@separator\mathrm{rev}\Min^{-1}}}

\rpm \rpm is a macro for revolutions per minute (rev min⁻¹).

8.13 Frequency

\DeclareRobustCommand\Hz{\ensuremath{\expandafter\units@separator\mathrm{#1Hz}}}

\Hz \Hz is a macro for Hertz (Hz). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.
8.14 Pressure

\barP \barP is a macro for bar (bar).  (The use of barP instead of just bar is due the \LaTeX command \bar.) This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\atm \atm is a macro for atmosphere (atm).

\Pa \Pa is a macro for Pascals (Pa). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\mmHg \mmHg is a macro for millimeters of mercury (mmHg).

\inHg \inHg is a macro for inches of mercury (inHg).

\lbsi \lbsi is a macro for pounds per square inch (psi). (Note that \psi is a latex command for the greek letter ψ).

\lbsf \lbsf is a macro for pounds per square foot (psf).
\Ba  \Ba is a macro for Barre (Ba). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

\Torr  \Torr is a macro for Torr (Torr). This macro accepts an optional argument for a prefix. If no option is supplied, no prefix will be prepended.

8.15 Other

\mol  \mol is a macro for moles (mol).

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- Grams .............................................. 10

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### G
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- gauss ............................................... 10

### F
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- farads .............................................. 10
- erg .................................................. 10
- eV ................................................... 10
- Joules ............................................. 10
- kcal .................................................. 10
- kelvins ............................................. 10
- keV .................................................. 10
- kg .................................................... 10
- km .................................................... 10
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- kmps .................................................. 10
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### C
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- calorie .............................................. 10
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- circ .................................................. 10
- cm ................................................... 10
- Coulomb ........................................... 10

### B
- Ba ..................................................... 10
- barP .................................................. 10
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### M
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