

Length units in T_EX

The given conversions may suffer from rounding errors and are only for guidance.
The shown rules are 1 mm thick. Please note that the very short rules may not be rendered correctly on your screen (or printer) and appear longer than they are.

Absolute Units

Scaled Point Definition The scaled point is defined as 1/65 536 points. Note This is the smallest unit T _E X uses. Conversion 1 sp = 0 mm = 0.000 02 pt	Millimeter Definition SI unit Conversion 1 mm = 2.845 26 pt = 186 467 sp
Point Definition The point is defined as 1/72.27 inch. Conversion 1 pt = 0.351 46 mm = 65 536 sp	Pica Definition One pica equals twelve points. Conversion 1 pc = 4.217 54 mm = 12 pt = 786 432 sp
Big Point (DTP or PostScript point) Definition The big point is defined as 1/72 Inch. Note Word, InDesign and other DTP applications use this definition for points. Conversion 1 bp = 0.352 77 mm = 1.003 74 pt = 65 781 sp	Cicero Definition One Cicero equals twelve Didot points. Conversion 1 cc = 4.5128 mm = 12.8401 pt = 841 489 sp
Didot Point Definition An old unit used by European printers Conversion 1 dd = 0.376 07 mm = 1.07 pt = 70 124 sp	Centimeter Definition SI unit Conversion 1 cm = 10.000 05 mm = 28.452 74 pt = 1 864 679 sp
	Inch Definition One inch equals 2.54 centimeters. Conversion 1 in = 25.400 13 mm = 72.269 99 pt = 4 736 286 sp

Relative Units

These units depend on the currently active font size.
For more details about em and ex see: <http://tex.stackexchange.com/q/4239/4918>

Em Definition Traditionally, an em was defined as the width of a capital M or to be equal to the font size, but today the actual value is defined in the font file. Note This unit should be used for all horizontal distances that should change relative to the font size; the paragraph indentation for instance.	Ex (x Height) Definition Traditionally, an ex was defined as the height of a lower case x, but today the actual value is defined in the font file. Note This unit should be used for all vertical distances that should change relative to the font size.	Math Unit Definition This unit equals approx 1/18 em of the math font family. Note It can only be used for spacing in math mode.
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