

Architectural Drafting Using AutoCAD

Dimension Variables



The following list shows the AutoCAD dimension variables that can be stored within a drawing or template file. The value of each of these variables is written into the file when the drawing is saved, so the next time the drawing is opened, the values remain the same. Although the easiest way to set these variables is to use the **Dimension Style Manager**, the values for most of the variables can also be set by entering the variable name or by using the **SETVAR** tool. Some variable values are derived by AutoCAD from the current condition of the drawing or the drawing environment, and cannot be set directly. These are referred to as *read-only* variables.


The following list provides a brief description of the system variable and the default setting when no specific drawing is referenced. The symbol (\mathcal{R}) indicates that the variable is read-only.

Variable Name	Default Value	Description
DIMADEC	0	Controls the number of decimal places for angular dimensions.
DIMALT	Off	Enables or disables alternate units dimensioning.
DIMALTD	2 (imperial) or 3 (metric)	Controls decimal places for alternate units dimensions.
DIMALTF	25.4000	Alternate units dimension scale factor.
DIMALTRND	0.0000	Rounding value for alternate dimension units.
DIMALTTD	2 (imperial) or 3 (metric)	Decimal places for alternate units tolerance values.
DIMALTTZ	0	Zero suppression for alternate units tolerance values.
DIMALTU	2	Units format for alternate units dimensions.
DIMALTZ	0	Zero suppression for alternate units dimension values.
DIMANNO	\mathcal{R}	Tells if the dimension style is annotative.
DIMAPOST	""	Prefix/suffix for alternate units dimensions.
DIMARCSYM	0	Displays arc symbols in arc length dimensions.
DIMASSOC	2	Controls associative dimensioning.
DIMASZ	0.1800	Dimension line and arrowhead size.
DIMATFIT	3	Controls placement of text and arrowheads when there is insufficient space between the extension lines.
DIMAUNIT	0	Unit format for angular dimension values.

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Variable Name	Default Value	Description
DIMAZIN	0	Controls zero suppression for angular dimensions.
DIMBLK	""	Block type to use for both arrowheads.
DIMBLK1	""	Block type to use for first arrowhead.
DIMBLK2	""	Block type to use for second arrowhead.
DIMCEN	0.0900 (imperial) or 2.5000 (metric)	Controls placement of center marks or centerlines.
DIMCLRD	0	Dimension line, arrowhead, and leader line color.
DIMCLRE	0	Dimension extension line color.
DIMCLRT	0	Dimension text color.
DIMCONSTRAINTICON	3	Determines whether the lock icon displays next to dimensional constraint text.
DIMDEC	4 (imperial) or 2 (metric)	Decimal places for dimension values.
DIMDLE	0.0000	Dimension line extension beyond extension lines.
DIMDLI	0.3800 (imperial) or 3.7500 (metric)	Incremental spacing between baseline dimensions.
DIMDSEP	. (period, imperial) or , (comma, metric)	Specifies a single character to use as a decimal separator for decimal unit dimensions.
DIMEXE	0.1800 (imperial) or 1.2500 (metric)	Extension line distance beyond dimension line.
DIMEXO	0.0625 (imperial) or 0.6250 (metric)	Distance from origin points to extension lines.
DIMFRAC	0	Controls the fraction format used for architectural and fractional dimensions.
DIMFXL	1.0000	Length of extension lines between dimension line and dimension origin.
DIMFXLON	Off	Sets extension lines to a fixed length.
DIMGAP	0.0900 (imperial) or 0.6250 (metric)	Gap size between dimension line and dimension text.
DIMJOGANG	45	Angle of the transverse segment of a jogged radius dimension.
DIMJUST	0	Horizontal justification of dimension text.
DIMLDRBLK	""	Controls the type of arrowhead used for leaders.
DIMLFAC	1.0000	Scale factor for linear dimension values.
DIMLIM	Off	Toggles creation of limits-style dimension text.
DIMLTTEX1	""	First extension line's linetype.
DIMLTTEX2	""	Second extension line's linetype.
DIMLTTYPE	""	Sets a dimension line's linetype.

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Variable Name	Default Value	Description
DIMLUNIT	2	Specifies units for all nonangular dimensions.
DIMLWD	-2	Lineweight value for dimension lines.
DIMLWE	-2	Lineweight value for extension lines.
DIMPOST	""	Prefix/suffix for primary units dimension values.
DIMRND	0.0000	Rounding value for dimensions.
DIMSAH	Off	Toggles appearance of arrowhead blocks.
DIMSCALE	1.0000	Global dimension feature scale factor.
DIMSD1	Off	Toggles suppression of first dimension line.
DIMSD2	Off	Toggles suppression of second dimension line.
DIMSE1	Off	Toggles suppression of first extension line.
DIMSE2	Off	Toggles suppression of second extension line.
DIMSOXD	Off	Suppresses dimension lines outside extension lines.
DIMSTYLE		Name of current dimension style.
DIMTAD	0 (imperial) or 1 (metric)	Sets text placement relative to dimension line.
DIMTDEC	4 (imperial) or 2 (metric)	Decimal places for primary units tolerance values.
DIMTFAC	1.0000	Scale factor for fractional or tolerance text size.
DIMTFILL	0	Changes background of dimension text.
DIMTFILLCLR	0	Changes color for text background in dimensions.
DIMTIH	On (imperial) or Off (metric)	Orientation of text inside extension lines.
DIMTIX	Off	Toggles forced placement of text between extension lines.
DIMTM	0.0000	Lower tolerance value for tolerance dimensions.
DIMTMOVE	0	Controls the format of dimension text when it is moved.
DIMTOFL	Off (imperial) or On (metric)	Toggles forced dimension line creation.
DIMTOH	On (imperial) or Off (metric)	Orientation of text outside extension lines.
DIMTOL	1 (imperial) or 0 (metric)	Toggles creation of appended tolerance dimensions.
DIMTOLJ	1	Vertical justification for dimension tolerance text.
DIMTP	0.0000	Upper tolerance value for tolerance dimensions.
DIMTSZ	0.0000	Controls size of dimension line tick marks drawn instead of arrowheads.

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Variable Name	Default Value	Description
DIMTVP	0.0000	Vertical position of text above or below dimension line.
DIMTXSTY	Standard	Text style used for dimension text.
DIMTXT	0.1800 (imperial) or 2.5000 (metric)	Size of dimension text.
DIMTXTDIRECTION	0	Controls the reading direction of dimension text.
DIMTZIN	0 (imperial) or 8 (metric)	Zero suppression for primary units tolerance values.
DIMUPT	Off	Controls user placement of dimension line and text.
DIMZIN	0 (imperial) or 8 (metric)	Zero suppression for primary units dimensions.