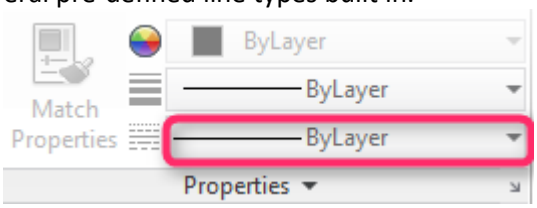
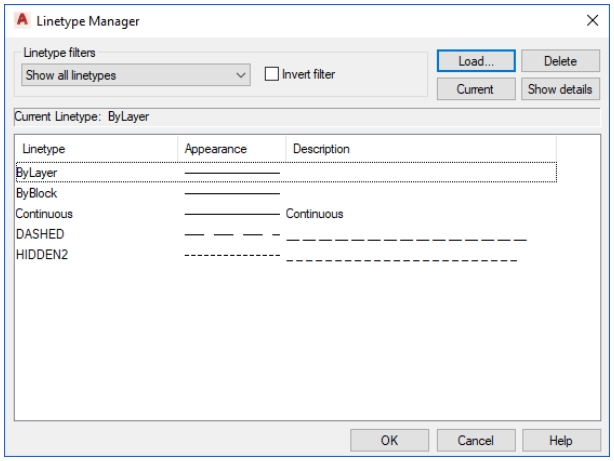
Line Types

AutoCAD Electrical 2018

AutoCAD Electrical and indeed any version of AutoCAD has several pre-defined line types built in.



To browse the current selection, select the *Home* ribbon tab > Then *Other*



Line type information is stored in the following file ACAD.LIN or the ACADISO.LIN:

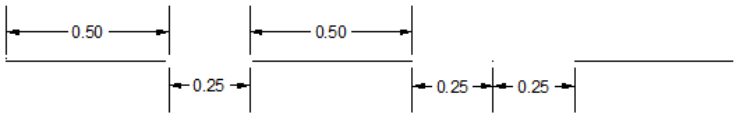
C:\Users\<<user name>>\AppData\Roaming\Autodesk\AutoCAD Electrical 201*\R2#.#\enu\Support

This file can be opened using Notepad. BEFORE making any changes, make a copy of the file so that you can revert back to if necessary.

Let's take a look at one of the existing definitions to see how they work.

*BORDER,Border __ __ . __ __ . __ __ . __ __ . __ __ .
A,.5,-.25,.5,-.25,0,-.25

Every linetype definition consists of two lines of text.
The first line consists of an asterix, name, description and a preview.
The second line always starts with an “A” and then a series of values to define the actual pattern. Positive values represent a line of that length, negative values represent a space of that length, and zero’s represent periods. Below you can see how these values relate to the actual linetype.



Linetypes with text become a bit more complicated by including a portion specific to the text in brackets. This bracket portion defines the linetype text, text style, text size, rotation angle, horizontal offset, and vertical offset.

*GAS_LINE,Gas line ----GAS----GAS----GAS----GAS----GAS----GAS--
A,12.7,-5.08,["GAS",STANDARD,S=2.54,U=0.0,X=-2.54,Y=-1.27],-6.35

Determining the horizontal and vertical offsets can be tricky but experimentation should resolve.
In this instance a text style that exists in all drawings is used (standard) and this text style should have a text height of 0 defined in STYLE. This will mean that the text height is controlled by the height setting in the linetype (s=.1) rather than a fixed value in your title block drawing.

The easiest way to create a new linestyle is to copy an existing. I copied the GAS line and changed the copy to a “3~” wire type for use within single line diagrams.

*3~,3~ ----3~----3~----3~----3~----3~----3~--
A,12.7,-5.08,["3~",STANDARD,S=2.54,U=0.0,X=-2.54,Y=-1.27],-6.35