LINE THICKNESS

PURPOSE
Specifies the thickness of the lines to appear between the plot points of each trace on subsequent plots or to specify the thickness for many diagrammatic graphics commands.

DESCRIPTION
The thickness is specified in vertical DATAPLOT 0 to 100 units. The thickness is typically between 0.05 and 0.3. The thickness command can be used for emphasis or to produce more readable text (e.g., using a thickness of around 0.2 tends to produce better output than the default when making transparencies).

SYNTAX
```
LINE THICKNESS <thick 1> <thick 2> ... <thick n>
```
where `<thick 1>`, `<thick 2>`, ..., `<thick n>` are decimal numbers or parameters in the range 0 to 100 that specify the desired line thicknesses. Up to 100 such line thicknesses can be specified.

EXAMPLES
```
LINE THICKNESS 0.1 0.2 0.3
LINE THICKNESS 0.1 0.1 0.2 0.2
LINE THICKNESS ALL 0.2
LINE THICKNESS 0.2 ALL
LINE THICKNESS
```

NOTE 1
See the introduction to the Diagrammatic Graphics chapter for a discussion on using the LINE THICKNESS command for diagrammatic graphics.

NOTE 2
The THICKNESS command sets the default thickness. The LINE THICKNESS command can be used to override the default for plot line traces only.

NOTE 3
Occasionally, DATAPLOT can generate “spikes” (particularly when lines are joined at angles very near 180 degrees) when drawing multiple lines. This is a bug and it only occurs when drawing thick lines as multiple lines in software.

NOTE 4
The default line width can vary between devices. If regions fills show “gaps,” you can specify what the size of a single width line is for a given device. See the documentation for SET PEN WIDTH under the given device in the Output Devices chapter for details.

NOTE 5
The LINE THICKNESS command with no arguments sets all line thickness to the default. The LINE THICKNESS command with the word ALL before or after the specified thickness assigns that line thickness to all traces. Thus LINE COLOR THICKNESS 0.2 ALL or LINE THICKNESS ALL 0.2 assigns the line thickness 0.2 to all traces.

DEFAULT
All line thickness are set to 0.1.

SYNONYMS
None

RELATED COMMANDS
- PLOT = Generates a data or function plot.
- LINES = Sets the types for plot lines.
- LINE COLOR = Sets the colors for plot lines.
- THICKNESS = Sets the thicknesses for all lines.
- CHARACTER THICKNESS = Sets the thicknesses for plot characters.
- SPIKE THICKNESS = Sets the thicknesses for plot spikes.
- BAR BORDER THICKNESS = Sets the thicknesses for plot bar borders.
- TITLE THICKNESS = Sets the thicknesses for plot title.
LINE THICKNESS

= Sets the thicknesses for plot labels.
LEGEND THICKNESS = Sets the thicknesses for plot legends.
FRAME THICKNESS = Sets the thicknesses for plot frame.
GRID THICKNESS = Sets the thicknesses for plot grids.

APPLICATIONS
Multi-trace plotting, Presentation Graphics

IMPLEMENTATION DATE
Pre-1987

PROGRAM
LET LEAD = DATA ... 164 426 59 98 312 263 607 497 213 54 160 262 547 325 419 94 70
LET POT = DATA ... 106 175 61 79 94 121 424 328 107 218 140 179 246 231 245 339 99

LET N = SIZE LEAD
LET X = SEQUENCE 1 1 N
LINE THICKNESS 0.1 0.3
TITLE DEMONSTRATE LINE THICKNESS
TITLE SIZE 5
PLOT POT LEAD VS X

DEMONSTRATE LINE THICKNESS