

Question 16

Q: How to change the view of a graph?

A: The view tab in the menu bar includes all functions to change the view of a graph.

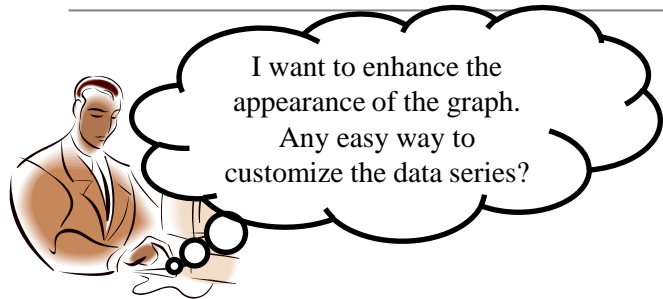
To edit the graphing properties, double-click on the graph to display all of them.

Please refer to the Femtet help menu below for more information.
Home>Show Results>Descartes, the Graphing Tool>Menus>View Menu

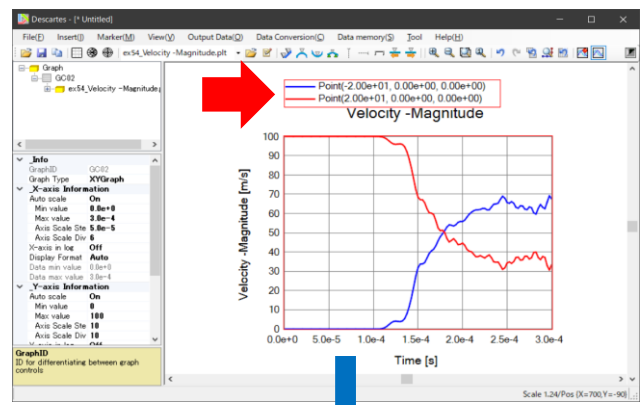
Please also refer to the next slides for more information.

A Tip on Femtet Operation

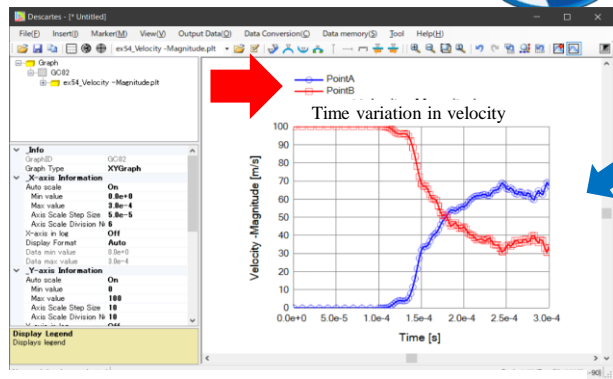
Customize Data Series



Double-click on the graph, and a window for the plot options will show up for editing the graphing properties such as plot name, color, line type, line width.



Double click on the graph



Plot Options

File (May change file by double clicking)	Plot	Value of Shift	Display Y-axis (primary axis)	Col	Line Type	Line Width	Dot Type	Size of dot	Display Secondary Y-axis	Col Line (Seco Y-axis)	Line Width (Secondary)	Dot Type (Seco Y-axis)	Dot Size (Secondary)
ex54_Velocity-Magnitude.p	PointA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blue	—	2	○		<input type="checkbox"/>	Red	2	None	8
ex54_Velocity-Magnitude.p	PointB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Red	—	2	□		<input type="checkbox"/>	Green	2	None	8

Apply OK Cancel

Change the plot name for a data series

Change the dot type

Example: Customize the plot name and dot type

*The graph title can be changed in the property

The screenshot shows the Murata Software interface. On the left, a 'Setting' dialog box is open, with a red box around the 'Display Graph' button. A red arrow points from this button to the 'Display Graph' button in the main window. The main window shows a graph titled 'Velocity - Magnitude' with two data series: a blue line for 'Point(2.00e+01, 0.00e+00, 0.00e+00)' and a red line for 'Point(-2.00e+01, 0.00e+00, 0.00e+00)'. The x-axis is 'Time [s]' and the y-axis is 'Velocity - Magnitude [m/s]'. A red box highlights the 'ex34_Velocity - Magnit...' menu item in the main window. The graph shows the blue line starting at 100 m/s and decreasing to about 35 m/s, while the red line starts at 0 m/s and increases to about 65 m/s.

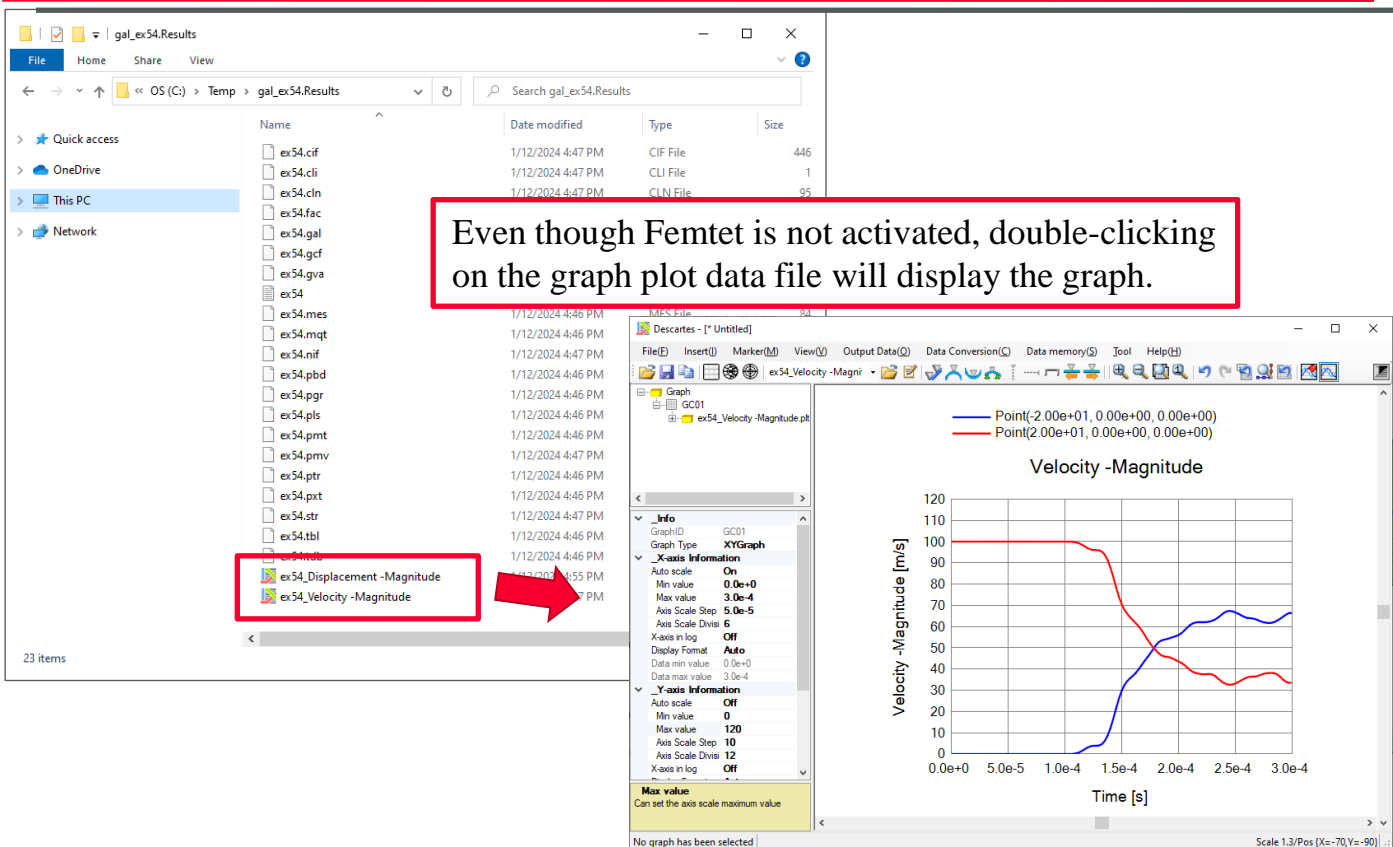
A graph data file (.plt) is automatically saved in the [Project name.Results] folder, located within the project's saved folder.

File name: *Analysis model name_Field type-Component.plt*

Note

If a graph data file with the same analysis model name and field type is created, the previously saved file with the same name will be overwritten.

How to Open Graph Plot Data File in Explorer



The image shows a Windows File Explorer window displaying a folder named 'gal_ex54.Results'. The file list includes various files with extensions like .cif, .cli, .cln, .fac, .gal, .gcf, .gva, .mes, .mqt, .nif, .pbd, .pgr, .pls, .pmt, .pmv, .ptr, .pxt, .str, .tbl, and .tbl. Two files, 'ex54_Displacement -Magnitude' and 'ex54_Velocity -Magnitude', are highlighted with a red box. A red arrow points from this box to the Descartes software window.

The Descartes software window shows a graph titled 'Velocity -Magnitude'. The Y-axis is labeled 'Velocity -Magnitude [m/s]' and ranges from 0 to 120. The X-axis is labeled 'Time [s]' and ranges from 0.0e+0 to 3.0e-4. Two data series are plotted: a blue line representing 'Point[-2.00e+01, 0.00e+00, 0.00e+00]' and a red line representing 'Point[2.00e+01, 0.00e+00, 0.00e+00]'. The red line starts at 100 m/s and decreases to approximately 35 m/s, while the blue line starts at 0 m/s and increases to approximately 65 m/s.

A red box highlights the text: "Even though Femtet is not activated, double-clicking on the graph plot data file will display the graph."

How to Edit Graphing Properties

Velocity - Magnitude

Point(-2.00e+01, 0.00e+00, 0.00e+00)
Point(2.00e+01, 0.00e+00, 0.00e+00)

Velocity - Magnitude [m/s]

Double-clicking on the graph allows the dialog box for editing the graphing properties to show up.

Plot Options

File (May change file by double clicking)	Plot	Value of Shift	Display Y-axis (primary axis)	Col	Line Type	Line Width	Dot Type	Size of dot	Display Secondary Y-axis	Col (Sec Y-axis)	Line Type (Seco Y-axis)	Line Width (Secondary Y-axis)	Dot Type (Seco Y-axis)	Dot Size (Secondary Y-axis)
ex54_Velocity-Magnitude.plt	Point(-2.00e+01, 0.00e+00, 0.00e+00)	0	<input checked="" type="checkbox"/>	Blue	—	2	None	8	<input type="checkbox"/>	Red	—	2	None	8
ex54_Velocity-Magnitude.plt	Point(2.00e+01, 0.00e+00, 0.00e+00)	0	<input checked="" type="checkbox"/>	Red	—	2	None	8	<input type="checkbox"/>	Green	—	2	None	8

Apply OK Cancel

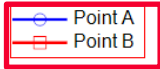
How to Edit Graphing Properties

Plot Options

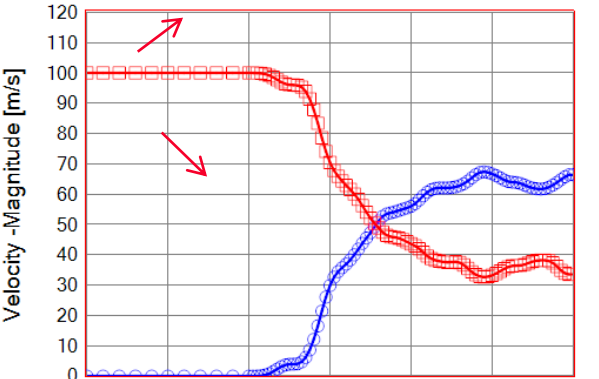
File (May change file by double clicking)	Plot	Value of Shift	Display Y-axis (primary axis)	Colk	Line Type	Line Width	Dot Type	Size of dot	Display Secondary Y-axis	Colk (Sei Y-ax)	Line Type (Seco)	Line Width (Secondary Y-axis)	Dot Type (Seco)	Dot Si Y-axis
ex54_Velocity-Magnitude.plt	Point A	0	<input checked="" type="checkbox"/>	Blue	—	2	○	8	<input type="checkbox"/>	Pink	—	2	None	8
ex54_Velocity-Magnitude.plt	Point B	0	<input checked="" type="checkbox"/>	Red	—	2	□	8	<input type="checkbox"/>	Teal	—	2	None	8

Apply OK Cancel

Plot names and dot types are changed.



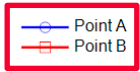
Velocity - Magnitude



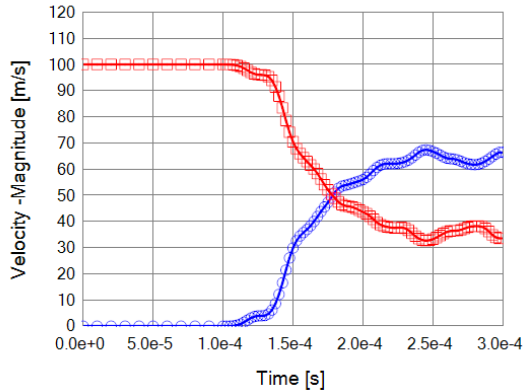
How to Change Title

The screenshot shows the Descartes software interface with a graph titled "Velocity - Magnitude". The left sidebar contains a settings panel for the graph, where the "Title" field is highlighted with a red box and contains the text "Velocity -Magni". A red arrow points from this field to the graph's title. Below the graph, there is a second plot titled "Time Variation in Velocity" showing two data series: "Point A" (blue circles) and "Point B" (red squares). The y-axis for both plots is "Velocity magnitude [m/s]" ranging from 0 to 120. The x-axis for the second plot is "Time [s]" ranging from 0.0e+0 to 3.0e-4.

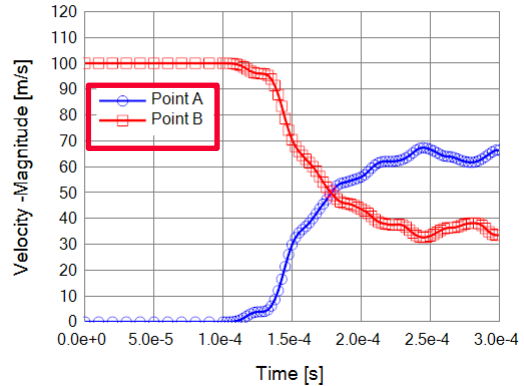
How to Change Position of Legend



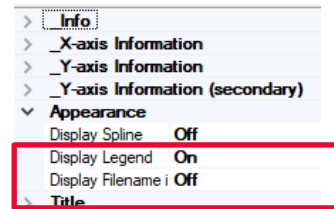
Time Variation in Velocity



Velocity -Magnitude



You can drag and move the legend and control its visibility using the property setting.



- > Info
- > _X-axis Information
- > _Y-axis Information
- > _Y-axis Information (secondary)
- ▼ Appearance
 - Display Spline Off
 - Display Legend On
 - Display Filename Off
- > Title