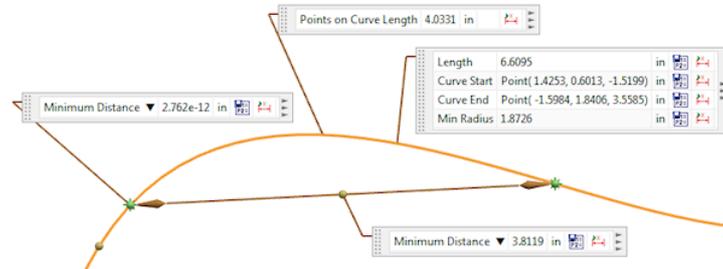


Measure

Use the **Measure** command to analyze your model and create measurements for the objects you select. You can control how the software processes the selected objects and filter the available measurements to display only the measurements you need.

- Based on your selection, the software infers measurements you may be interested in and displays them in the graphics window.
- You can control how the software processes the selected objects and filter the available measurements to display only the measurements you need.
- You can have multiple measurements in one measure feature.

Example You can select two faces and get both the angle and distance measurements as a single feature instead of separate measurement features for distance and angle.

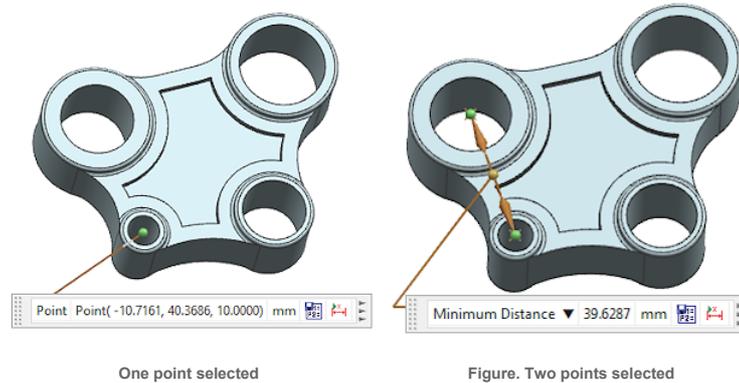


After you create the measurements, you can make them associative for downstream use, display them as annotation, or send the measurements results to the **Console** tab or to an **Information** window.

Creating measurements dynamically

Measurements are displayed based on a combination of the following:

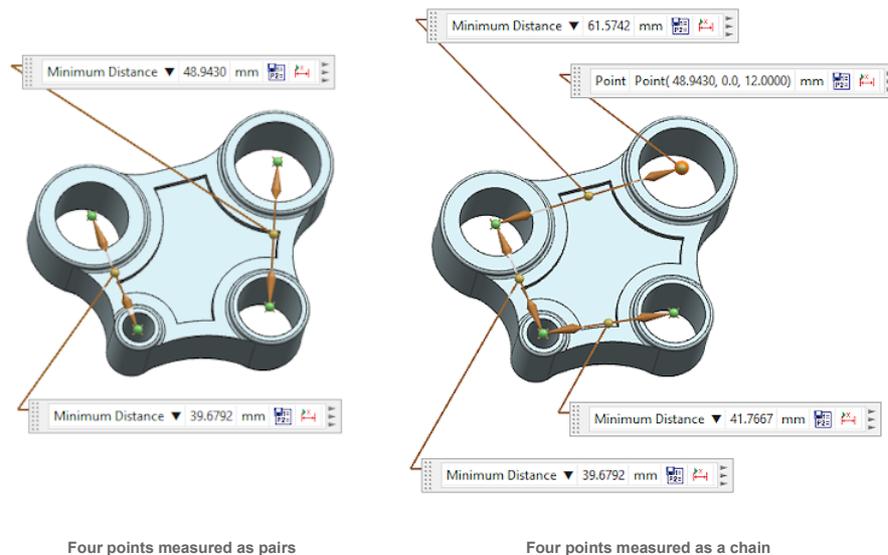
- The object(s) you select.



One point selected

Figure. Two points selected

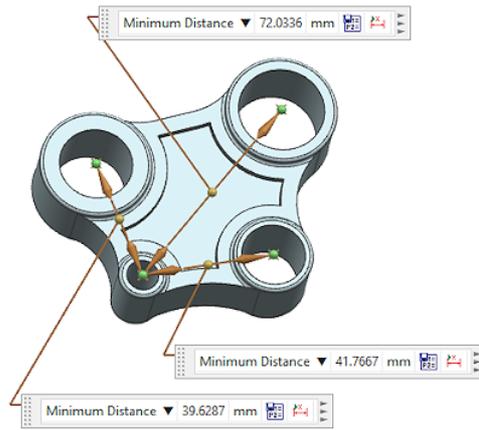
- Any filters you set to hide specific types of measurements, such as distance measurements, in the graphics window.
- The measurement method you use, which controls whether the selected objects are processed as individual objects, pairs, or objects in a chain.



Four points measured as pairs

Four points measured as a chain

- In some cases, the order of the objects as they are listed in the dialog box. For example, the first listed object defines the reference object when you use the **From Reference Object** measurement method, or the vertex of an angle when you select three points for measurement.

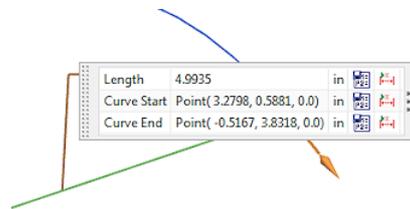


Measurements between the first point listed in the dialog box (reference object) and other points

When no measurements are available for the objects you select, the **Hints** group provides information to help you select objects and set options to make measurements available.

Scene dialogs

As soon as measurements are available, one or more scene dialogs display them in the graphics window. Scene dialogs update in real time when you make changes to your selection or to options in the dialog box, such as to the measurement method.



Making measurements associative

You can make measurements associative and use them in downstream feature creation. Associative measurements appear as features and measures in the **Part Navigator**, and expressions are created for each associative measurement in the **Expressions** dialog box.

Part Navigator features

Part Navigator measures

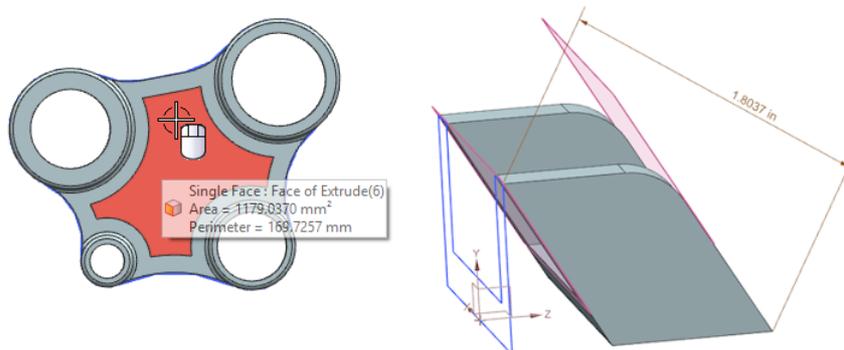
Name	Formula	Value
Default Group		
p28	(Measurement)	1.5011107
p35	(Measurement)	1.385640646
p115	(Measurement)	1.5011107

Expression dialog box

Displaying measurements

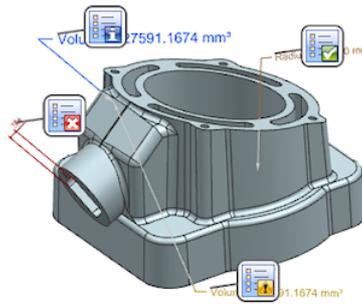
When the **Measure** dialog box is active, you can hover over objects to display basic object measurement information.

This is a quick way to preview the basic measurements of an object before you select it. You can also display measurements as associative or nonassociative annotations.



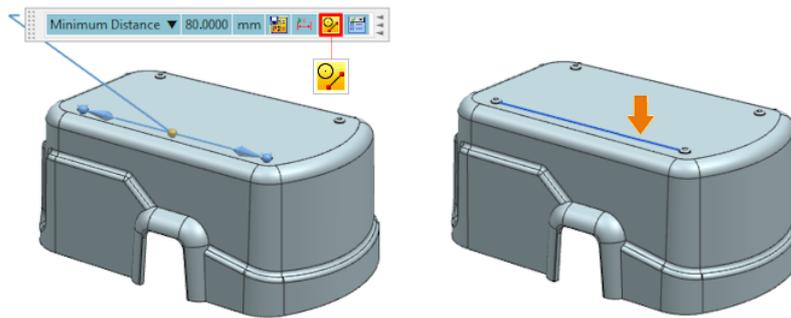
Creating requirements

You can create requirements that validate associative measurements and provide visual feedback. Requirements can be set to three types of severity: error, warning, or information.



Creating geometry from measurements

Use the **Create Geometry** option to create geometry directly from a measurement. The geometry can be associative or nonassociative depending on whether **Associative** is turned on for the measurement.

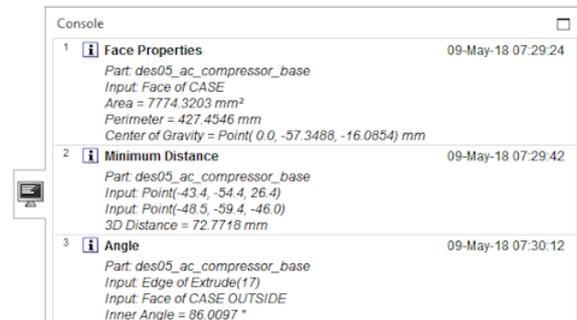


Turn on Create Geometry

Curve created from distance measurement

Displaying measurements in the Console or Information window

You can send all the measurements in an NX session to the **Console** tab on the Resource bar or to an **Information** window for display using the **Send Results to NX Console** and **Show Results in Information Window** options.



The **Console** tab keeps a log of all your associative and nonassociative measurement data in the NX session. You can refer back to this information as needed, and cut and paste the measurement data when you need to replicate it for other modeling tasks.

Where do I find it?

Command Finder	Measure
Graphics window	Left-click in graphics window →