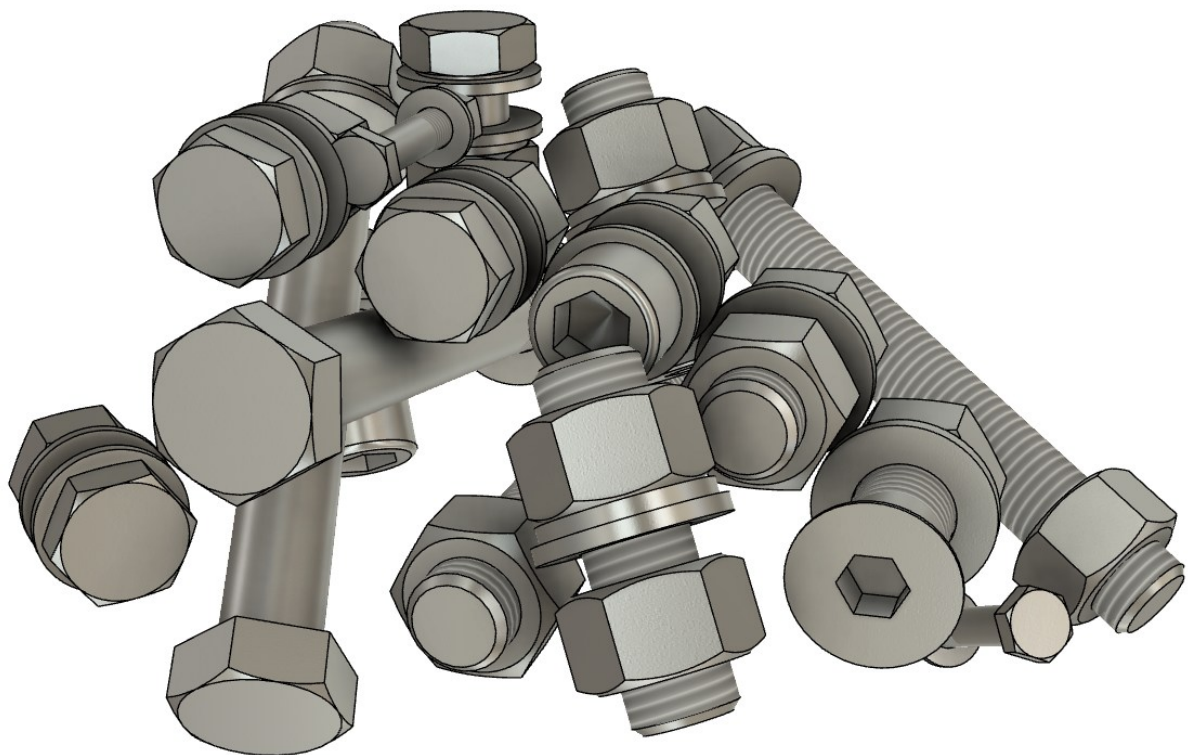


e-Bolts

For



AUTODESK
Inventor Professional



Bolts, nuts, washers and lock washers
according to ISO and DIN.

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1. Introduction.

Thank you for using our software.

e-Bolts is an add-in that has been built specifically for Autodesk Inventor. It is therefore necessary that Autodesk Inventor Professional is already installed on your workstation before you can use the software. More specifically, this version of e-Bolts is suitable for version Inventor 2025. Because Inventor 2025 works with the .NET 8.0 framework, this has the disadvantage that this version of e-Bolts will not work with all previous versions of Inventor.

Conceived and programmed in Belgium, e-Bolts works according to ISO and DIN.

With e-Bolts, it is possible to configure and then insert bolt connections within the working environment of the Inventor Assembly.

After the selection and configuration, you start the placement command, here e-Bolts will ask you where you want to connect the bolt connection.

2. Install the software.

Before you can start installing e-Bolts, you need to make sure that Autodesk Inventor Professional is installed on your workstation and that the version corresponds to the version of e-Bolts.



Make sure that Inventor is completely shut down.

The files of the Add-in are in a directory called: "eStairs". This directory contains at least the files "sBolts.dll" and "Autodesk.eBolts.Inventor.addin".

There is also a subdirectory "ButtonResources" which are all the images of the buttons. It goes without saying that you should not change anything in this structure. Any adjustment will result in the Add-in no longer working.

Copy the entire directory of the add-in to the following location:

C:\Users\ »**YourName**»\AppData\Roaming\Autodesk\ApplicationPlugins.

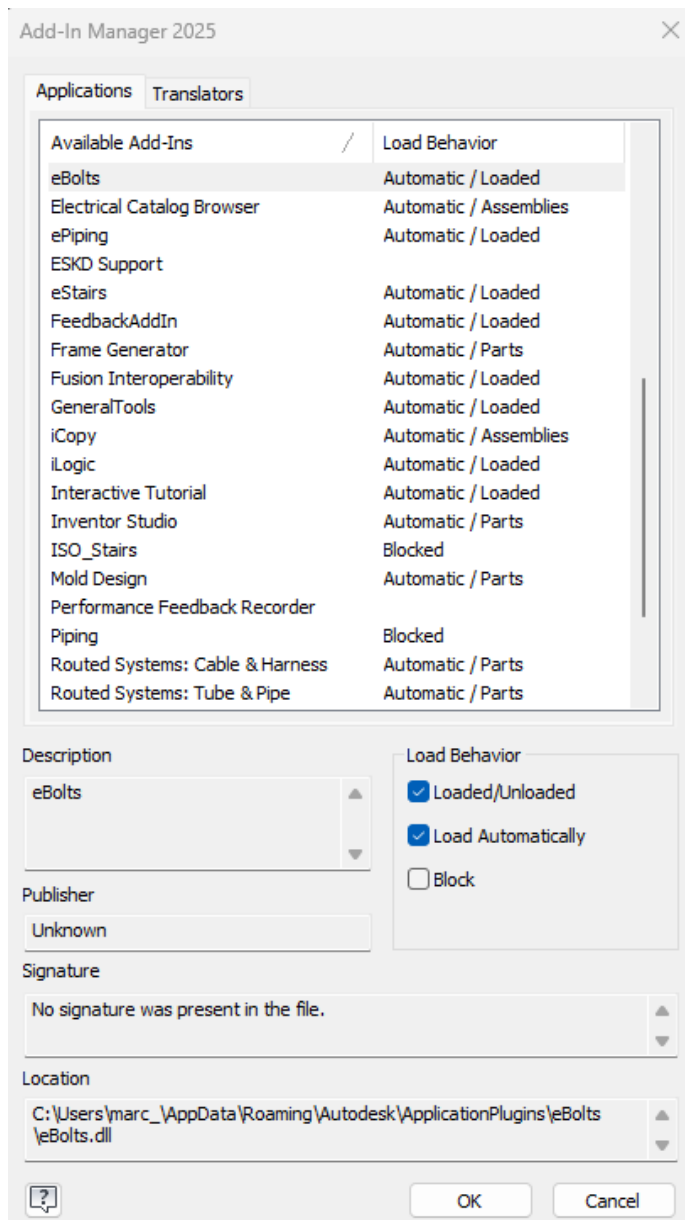
On the place »**YourName**» you must enter your username of windows.

Start Autodesk Inventor Professional, a window will appear during startup with the message that a new add-in has been found.

It's the "Add-in Manager Security Alert " and ask if its safe to open.

Accepted with OK, and Inventor will continue to be started.

On the "**Options**" panel, select the "**+Add-in**" field and the "Add-in Manager" window will open. Select the "**Applications**" tab, if it is not selected, and search for "eBolts" in the list of applications.



Select "eBolts" and you will notice that at the bottom the "Load Behavior" is set to "Block". This is a safety for new applications.

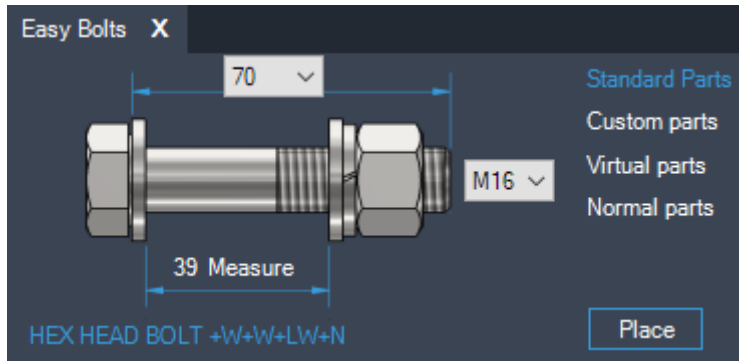
Uncheck "Block" and check the "Load/Automatically" and "Loaded/Unloaded" options.

Click OK to exit the Add-in Manager and the e-Bolts add-in is installed.

If you create a new assembly file or open an existing assembly file, the eBolts add-in panel will appear in the "Assemble" tab of the GUI (graphical user interface) of Inventor.

3. Using eBolts.

You can start Easy Bolts by clicking the “Place Bolts” button in the Assemble Tab of the ribbon. The Easy Bolts command window will appear in the upper left corner of the model space. As you can see, Easy Bolts follows the use of the Dark and Light UI Theme and a more modern look.

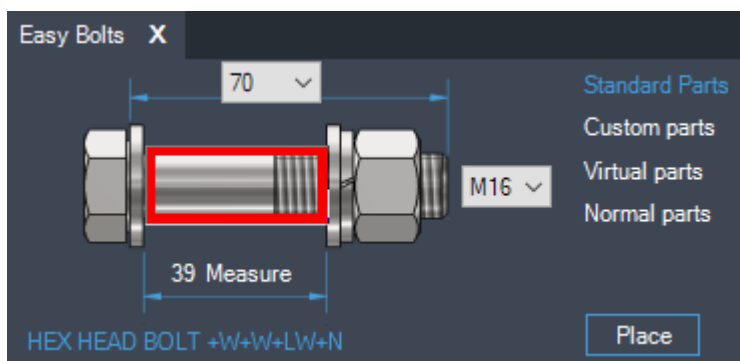


While the place bolts command is active, the rest of Inventor will be unavailable until the command is closed. You can exit Easy Bolts by clicking the X next to the title in the upper left corner or using the escape key.

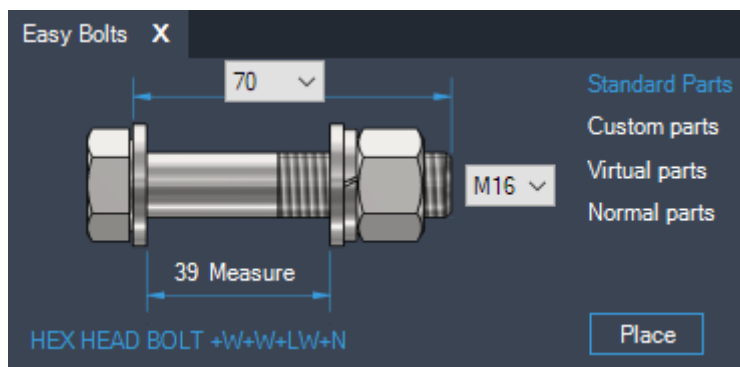
To place bolted connections with Easy Bolts, parts with holes must already be placed in the assembly.

4. Description GUI

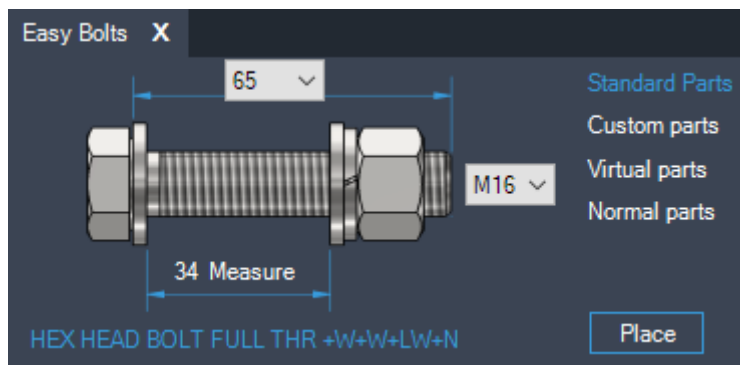
The bolt connection can be configured in different ways. The diameter of the bolt connection can be adjusted by the combo box on the right side of the image. The bolt length can be adjusted by the combo box at the top of the image. The type of bolt can be adjusted by clicking on the body of the bolt in the area shown below.



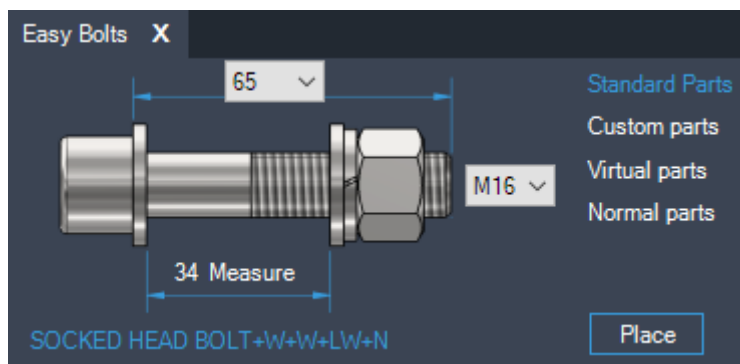
A bolt ISO4014 can be chosen.



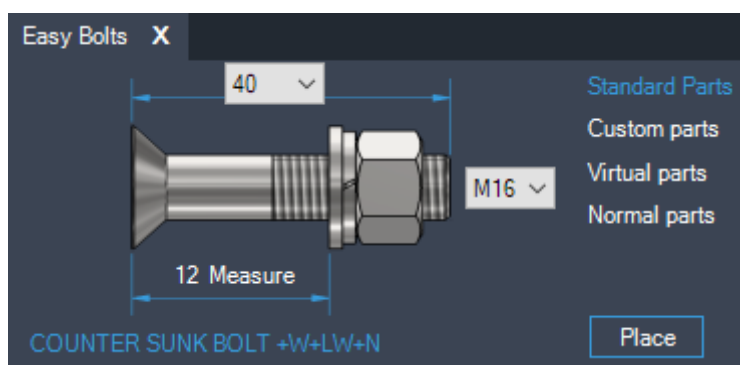
Or an ISO4017



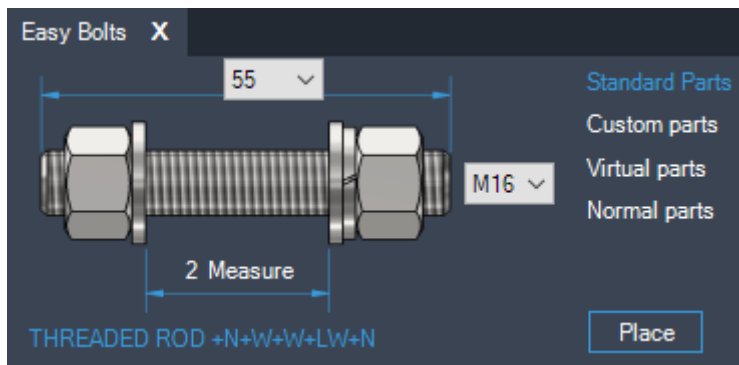
Or an ISO4762



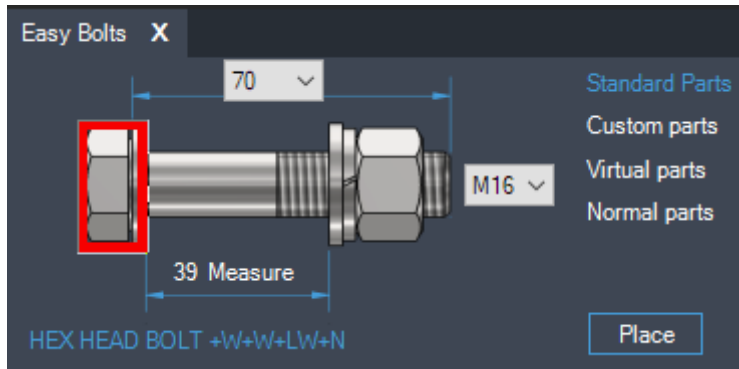
Or ISO10642



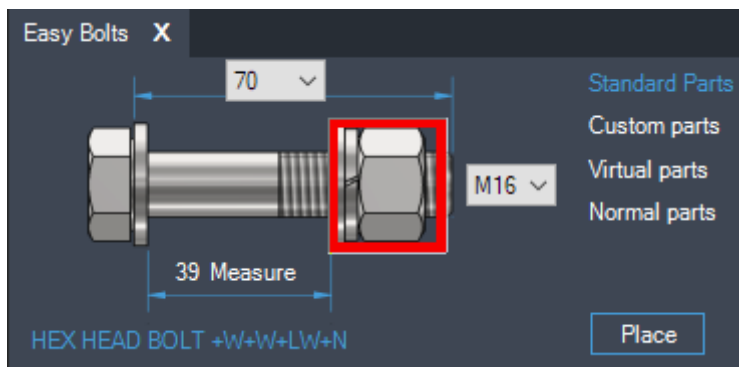
or a stud bolt DIN 976-1 B.



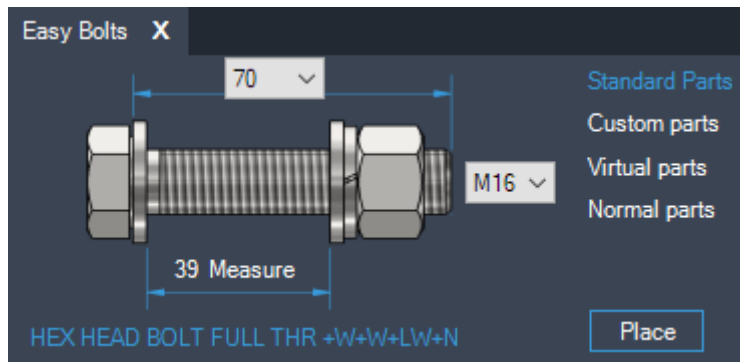
The left side of the bolted connection can be changed by clicking in the area as below. With each click, the bolted connection will change to with or without a washer.



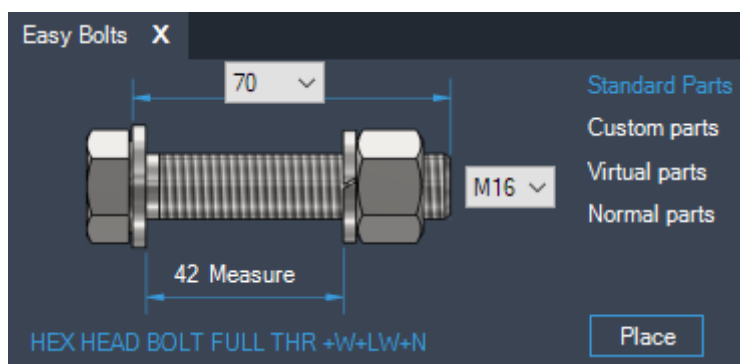
The bolt ISO10642 which has a countersunk head obviously does not allow this washer. The right side of the bolt connection can be changed by clicking on the area as below.



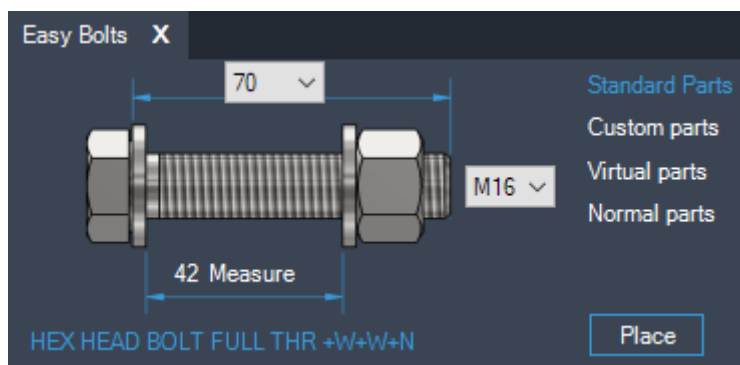
There are four possible configurations. With each click on this area, the boat connection on this side will change to: Washer, lock washer and nut



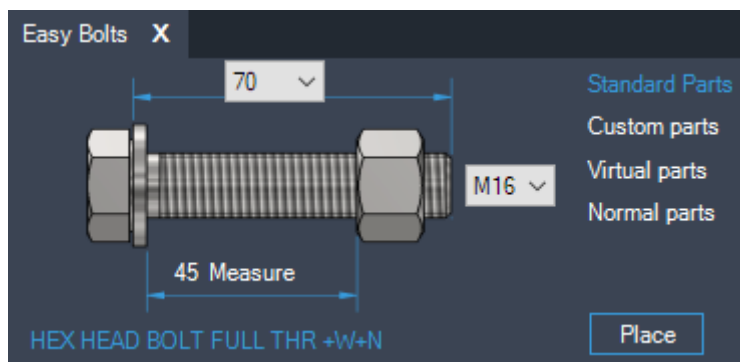
Lock washer and nut



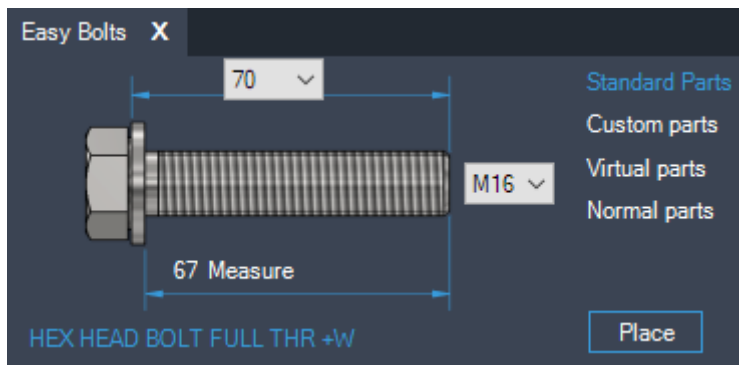
washer and nut



nut



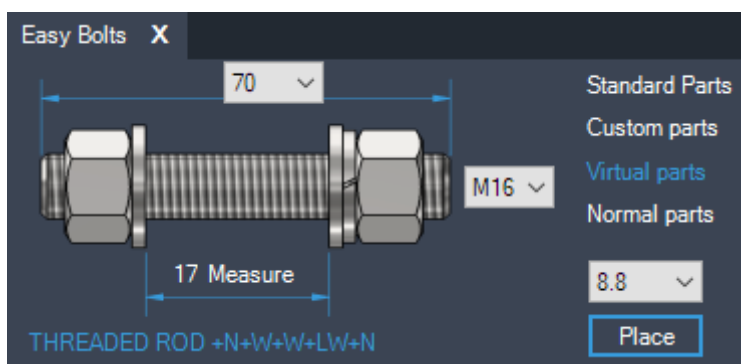
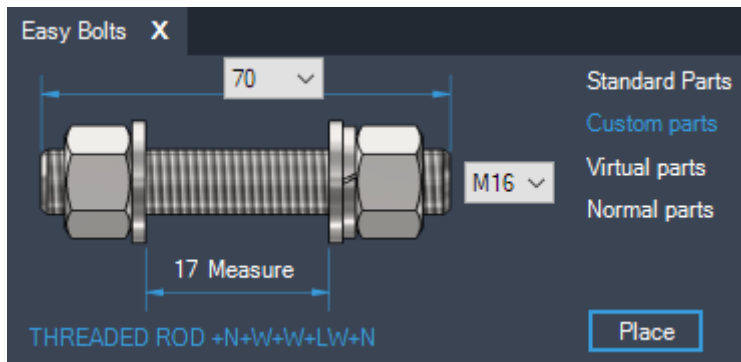
Or nothing



A bolt length can also be calculated from a selected bolt size. You do this by clicking on Measure at the bottom dimension line. Easy Bolts will successively ask you to select a starting plane and an end plane and then the configuration will be calculated. If this configuration is possible, a green V will appear next to “Measure.” If further adjustments are made to the configuration, the green V will disappear, and a new measurement will be required before a bolt can be placed correctly.

Onderaan de figuur staat een code die de gekozen boutverbinding voorstelt.

Rechts in het commando window zijn er vier selecties mogelijk. Hiermee bepaal je welke soort model er zal geplaatst worden.



If you choose to place Virtual parts or Normal parts a combo list is made available to select a material.

In the lower right corner is the “Place” button to start placing the bolted joint.

After starting, the command window of Easy Bolts closes, and Inventor asks to select a circular edge. After this edge is selected, Inventor enters the chosen configuration into the model and secures the first element to the selected edge with an insert constrain. Afterwards, the command window reopens, ready to insert the next bolt connection.

The bolt types to choose is limited to these as listed above and this cannot be modified. To place bolted connections from the content, center the original ISO and DIN families from the content center must be loaded and accessible in the project.

As with all Easy add-ins, the project directory of Easy bolts must be determined in the project file. Thus, it is not possible to use Easy bolts in default projects nor in projects that are poorly configured.